

Factors Influencing the Success of Inclusive Practices in Singaporean Schools

Shadow Teachers' Perspectives

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Master's Thesis

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Abstract

The main purpose of this study was to examine shadow teachers' experiences and to explore the factors influencing the implementation of inclusive practices in Singaporean schools. In particular, the factors under investigation in this study were child characteristics, teacher characteristics (such as awareness and knowledge about inclusive practices, background & training, attitudes towards inclusion, as well as understanding and perception of role) and collaboration with mainstream teachers, parents and other important parties.

A qualitative research approach based on semi-structured interviews was employed. Six shadow teachers participated in the study and the data was analysed with a hermeneutic approach.

The findings indicated that insufficient collaboration (in particular with the mainstream teachers and the school) negatively impacted the success of inclusive practices. Another factor that was found to have a large impact on the implementation of inclusive practices was a lack of awareness and knowledge. Data from the study indicated that most of the factors were interdependent and worked hand-in-hand to contribute to the success or failure of inclusive policies. Other challenges which emerged from the data were teacher responsibility, tension among authority figures, and large class sizes posing a barrier to inclusion.

It was suggested that raising awareness and provided training to teachers and schools would greatly aid the process of moving towards more inclusive schools. Teachers need to be persuaded that inclusion is beneficial to all pupils. Schools would also benefit from an increase in manpower (teachers and special needs personnel) and smaller class sizes.

Keywords: inclusion, inclusive practices, shadow teachers

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“If a child can’t learn the way we teach, maybe we should teach the way they learn.”

- Ignacio Estrada

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1 Introduction

1.1 Introduction

Inclusion has been a priority for schools in countries all over the world (see: the Jomtien declaration, 1990; the Salamanca Statement, 1994; the Dakar framework, 2000). In Singapore, where the education system is competitive and rigorous (OECD, 2011), and where the mindset of the general population is achievement-oriented (Bedlington, 1978), the challenges to attaining inclusive schools are many. In addition, Singapore is the third most densely populated country in the world (approximately 7,697 people/km²) (Government of Singapore, 2015), and although the pupil-teacher ratio in primary schools is 17, the actual class size in a school could be as high as 30 to 40 pupils (Liang, 2012; Leong, 2014). This is a stark contrast to countries like Norway, Iceland and Luxembourg, where the pupil-teacher ratio is less than 11, and average class sizes are less than 20 (OECD, 2013).

Given the large class sizes, and high pupil-teacher ratio, it is not always possible for all pupils with special needs in mainstream schools to get the specialized attention that they need. Despite having some teachers trained in special education and special needs educators in almost every school (in Singapore, the term used is *Allied Educators (Learning and Behavioural Support)*) (MOE, 2014), there is still a lack of manpower and expertise to achieve full inclusion, and it is not uncommon to take the child out of the classroom for individual sessions with the special needs educator (Yeo, Chong, Neihart & Huan, 2014). In recent years however, there has been a newly emerging trend in Singapore; parents have started to hire shadow teachers to assist their children in adapting to mainstream classrooms (Chia, 2013). These shadow teachers assist the children in assimilating into mainstream schools by improving the children's behaviour and interaction with teachers and other pupils, providing guidance and feedback, as well as fostering independence (Nurture Pods, 2014; Milestones, 2013).

1.2 Purpose Statement and Research Questions

I am intrigued by this new phenomenon of hiring shadow teachers and the fact that this new private industry is thriving. I would like to investigate if shadow teachers, on top of helping the pupils assimilate into mainstream schools, simultaneously contribute towards the goal of inclusive schools and to examine the factors that influence inclusion.

1.2.1 Research Question & Sub-questions

The main research question of this study is: *what are the factors affecting the success of shadow teachers in contributing towards inclusive practices in Singaporean schools?*

The following sub-questions were raised to further investigate this issue:

- 1) Do child characteristics affect the quality of inclusion a child receives?
- 2) Do teacher characteristics impact the implementation of inclusive practices?
- 3) How important is collaboration in the journey towards an inclusive school?

The focus of this study will be shadow teachers and their experiences, and the questions will be examined from their perspective.

1.3 Definition of key terms

The following terms are defined for the context in which they are used in this study:

Shadow teacher: A *shadow teacher* is an educational professional who assists a child with special educational needs in a mainstream school environment in order to help them function independently and successfully (Shadow Advantage, 2014; Milestones, 2013). These teachers are qualified to guide and assist children with a variety of learning disabilities. Most of them generally have a background in teaching, psychology, early intervention and/or special needs education and have undergone further training provided by the shadow teaching companies to improve their competency as shadow teachers. They attend courses and workshops about the

different learning disabilities and difficulties, and learn strategies to meet the diverse needs of children (Nurture Pods, 2014). In Singapore, these shadow teachers are hired by the child's parents so as to meet his/her special educational needs in the mainstream classroom (Chia, 2013).

Inclusion: *Inclusion* is defined as a dynamic process, which encompasses the transformation of education systems, cultures and practices 'in celebration of diversity' (Barton & Armstrong, 2007, p.5). This entails making modifications to the environment as well as the curriculum, teachers modifying their teaching strategies and involved parties working hand-in-hand in order to respond to the diverse needs of pupils (UNESCO, 2005; Rose, 2000).

Mainstream Teacher: In this study, *mainstream teachers* refer to the teachers who work in mainstream classrooms in general education – and with whom the shadow teachers work with.

Special Needs Assistant (SNA) and Teaching Assistant (TA): *SNAs* and *TAs* are support staff who have a number of roles in the classroom, ranging from supporting the teacher to helping pupils with special needs with classroom activities and other aspects of school life (Groom & Rose, 2005).

Shadow teachers and teaching assistants have fairly similar job descriptions; the main difference being that shadow teachers are usually formally trained and they are hired by the parents instead of the school (in Singapore) while teaching assistants are usually hired by the schools, and depending on the availability of personnel, may be trained or untrained. The literature review in this study will thus also include literature about SNAs and TAs.

1.4 Significance of the Study

As shadow teachers are a relatively new phenomenon in Singapore, it is useful to acquire information about their experiences and to examine what is required for successful inclusive practices, given the emphasis on special education and the importance of inclusion in recent years (Lindsay, 2007; Clark, 1999; UNESCO, 2005).

Information in this study could be useful for improving the quality of shadow teaching services and to identify any challenges they might be facing. Currently very little literature exists regarding shadow teachers in Singapore (or elsewhere in the world) and any additional knowledge would be beneficial to the field.

Additionally, this study may hopefully raise awareness about inclusion and inclusive practices in Singapore, and mainstream teachers and shadow teachers may be inspired to reassess their understanding and commitment to the concept of inclusive education.

1.5 Scope of the Study

This study is limited to shadows' teachers perspectives and experiences regarding inclusive education. Due to the time and space constraints, other important elements, which could have been very beneficial to the study (such as interviews of mainstream teachers who have worked with shadow teachers and observations of the interaction between shadow teachers and mainstream teachers) were not included.

With regards to inclusion and inclusive education, while I would consider inclusion as an expansive notion that applies to all children (and adults) and is not restricted to the sphere of disability alone, this study focuses only on children with learning difficulties in a school setting.

I would also like to acknowledge that there could be a shift in the level of awareness, understanding and knowledge of the participants since the interview was carried out. This study gives an account of the circumstances at the time of the interview and before.

The growing body of literature dealing with inclusion and shadow teachers will serve as a background for this study. I will also refer to literature about teaching supports, and teaching assistants, due to the lack of literature written about shadow teachers specifically.

1.6 Structure of the Thesis

The thesis consists of six chapters.

Chapter 1 provides an introduction to the study by presenting the aims, research questions, definition of key terms as well as the significance and scope of this study.

Chapter 2 shares some background information regarding inclusion, the education system in Singapore and shadow teaching. It goes on to set a theoretical perspective for the rest of the paper.

Chapter 3 explains and describes the methodology used and walks us through the process of data collection and analysis. Reliability, validity and ethical considerations will also be discussed.

Chapter 4 presents the results that emerged from the data in categories and themes to facilitate a better understanding of the big picture.

Chapter 5 discusses the findings while referring to the relevant literature. The second part of Chapter 5 provides a summary of key findings and presents a discussion of inclusion in Singaporean schools.

Chapter 6 concludes the thesis by discussing the implications, limitations of the study, and potential for future research.

2 Theoretical Framework

2.1 Introduction

This chapter discusses the theoretical framework that provides a contextual background for this paper. The definition of inclusion (2.2) will be revisited, and so will the education system (2.3) and shadow teaching (2.4) in Singapore. Most importantly, the factors influencing successful inclusion will be examined (2.5) to lay the theoretical groundwork for this study.

2.2 Inclusion

There has been and continues to be plenty of literature being written about inclusion. In spite of that, there exists a moderate amount of ambiguity with regard to its definition (Farrell & Ainscow, 2002). The consensus is that the concept of inclusion is based on the fact that all students are different in multiple ways (not limited to disability), and in order to accommodate their learning needs, schools need to innovate and modify their policies and practices (Sharma, Loreman & Forlin, 2012). The inclusive movement acknowledges and respects diversity, and proposes that education structures, systems and methodologies meet the needs of all children; as opposed to children striving to fit into existing structures (Ballard, 1999). It is a dynamic process that is part of a broader approach to achieve an inclusive society (EENET, 1998; Barton & Armstrong, 2007).

The philosophy of inclusion was first articulated by UNESCO in the Salamanca Statement (UNESCO, 1994), which states:

Regular schools with this inclusive orientation are the most effective measures of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all; moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system. (Section 2, p. ix)

The Salamanca Statement, as well as other international developments such as the United Nations Resolution of Education for All by 2015 (UNESCO, 1997) endorsed the inclusion movement and paved the way for relevant policy developments in other countries (Egelund, 2000; Meijer, 1998; Norwich, 2000) (as cited in Farrell, 2004).

These developments heightened the importance of teaching assistants and other special needs personnel so as to move towards the greater goal of inclusion, as well as to ensure that children are placed in the least restrictive environment (Lindsay, 2007). Farrell (2004) endorses a school-related concept of inclusion, containing four elements: presence, acceptance, participation and achievement, as he emphasizes: ‘It is not, for example, sufficient for children to simply be *present* in a school’ (p. 8). They would also have to be welcomed and accepted by the school, actively participate and contribute to the learning community in which they belong, and develop positive views of themselves. Inclusion is therefore, contingent on many aspects and factors, and requires influential parties (schools, governments, communities, local authorities) to help diminish the barriers to participation and learning for all pupils (Booth & Ainscow, 1998).

In this study, Farrell’s (2004) four elements of inclusion will be used as a metric to define successful inclusion.

2.3 The Education System in Singapore

This study needs to be understood in the local context of the Singaporean academic system – its practices, culture and challenges. Compared to other countries like the United States, the United Kingdom and Norway, Singapore’s experience is unique in that there is presently no legislation that mandates inclusive educational practices for children with special needs although primary schools have adopted inclusive practices since 2005 (Yeo et al., 2014). This implies that requests from pupils with special needs are subject to approval on a case-by-case basis (SPD, 2014). This is not to say that inclusion is not being embraced in Singapore. Although children with special needs attended separate special schools from the early 1960s all the way to 2004, the period from 2005 until the present has seen great improvements regarding the allocation of resources and funding, and the provision of teacher training with regards to special education (Poon, Musti-Rao, & Wettasinghe, 2013). In the past decade or

so, the Ministry of Education (MOE) has invested considerable resources towards training teachers and special education personnel and providing infrastructure and resources to move towards the goal of inclusive schools (Lim, 2011). For example, all primary schools have been staffed with at least one Allied Educator (Learning and Behavioural Support) and at least 10% of the teachers in each school are trained in Special Needs (MOE, 2014). Most schools are also equipped with facilities or programmes to cater to pupils with visual, auditory or physical disabilities. In addition, despite the lack of legislation regarding special needs education, all mainstream schools are expected to follow the same regulation, enforced by the MOE, stipulating that every child must be freely accepted within mainstream schools regardless of race, religion and learning ability. Consequently, all children with special needs, no matter their diagnosis, must be allowed to attend a mainstream school, even if their needs could be more appropriately met in a special school.

Challenges towards Inclusion in Singapore

Yeo et al. (2014) state it very aptly, *'Singapore is an interesting departure given the history of segregated special needs education for children dating from the 1960s, and a sophisticated legal system for which a mandate for inclusion is absent'* (p. 2). Consequently, the road to achieving inclusion is fraught with many obstacles.

Two of the biggest obstacles would be the lack of mainstream teachers who are trained in special needs and a general lack of exposure and awareness about inclusive education (Yeo et al, 2014). On top of that, the Singaporean education system is competitive and rigorous, and schools (as well as the general population) are extremely concerned with school rankings and academic achievements (OECD, 2011; Bedlington, 1978). This means that mainstream teachers are often under immense pressure to ensure that their pupils achieve a high level of academic performance. This poses a dilemma for mainstream teachers. Should they strive to achieve academic results or make adaptations to the curriculum that may result in the compromising of academic achievements (Ang, 2005)? This is similar in the United Kingdom, where schools are asked to raise academic standards while simultaneously being required to develop more inclusive practices (Farrell, 2004). These competing priorities prove a challenge for schools to achieve full inclusion (Evans & Lunt, 2002).

2.4 Shadow Teaching

It has been established that shadow teachers are skilled educators who work alongside the teacher in the classroom to provide academic, social, behavioural and emotional support to students with learning difficulties. They help their students adapt to the school climate and implement strategies that are fundamental for development (ACS Athens, 2014).

The shadow teacher provides additional support throughout the school day, both academically and psychologically, and fills in the gaps that exist in the learning process. He/she ensures that the pupil stays focused and participates in the classroom, helps the pupil with learning tasks and promotes interactions (Milestones, 2013). Ultimately, he/she helps the student build self-confidence as well as develop academic and social skills (ACS Athens, 2014). At the same time, shadow teachers are akin to a coach, intervening only when necessary. They are trained to identify opportunities for the pupil to learn to adapt to and face the challenges in his/her environment – all the time conscious of situations that require their assistance (Milestones Education, 2013). This “only when needed” principle allows the pupils to receive guidance when needed, while training them to be independent learners. When shadow teachers feel that the pupil is ready to be independent, they gradually decrease the amount to help they provide until the pupil is ready to be on his own. This process is referred to as ‘*fading*’ (Milestones Education, 2013).

A shadow teacher's services are very beneficial and can improve the child's quality of learning and overall classroom experience. These experts help the child focus, communicate, participate in class, socialize and learn to be independent. Dr Noel Chia, assistant professor from the Early Childhood and Special Needs Academic Group at the National Institute of Education goes so far as to say that ‘although classroom teachers are instrumental, they may not have the training that a qualified shadow teacher has’ (cited in Chia, 2013).

From the literature, it is unclear if the task of the shadow teacher is to aid in inclusive efforts. One might argue that the focus on the individual child and helping him or her to adapt to the typical classroom is reminiscent of the good old days of integration, where the focus was on ensuring that the child fit into existing norms (Thomas, Walker & Webb, 2005). However, shadow teachers serve to enable the child to participate in classroom activities and interact

better with teachers and classmates, as well as to contribute to the learning environment in which he or she belongs. These aspects are characteristic of inclusion (Farrell, 2004).

2.5 Factors Influencing the Success of Inclusive Practices

Shadow teachers can be said to contribute towards inclusion in two main ways:

- 1) Shadow teachers help the child to perform, belong, interact & participate better, thereby contributing to the different aspects of inclusion (Farrell, 2004) and simultaneously aiding the environment to be more inclusive.
- 2) Collaboration with the mainstream teacher merges expertise and raises awareness about inclusion. This helps the teacher to shape the environment more suitably, and supports the school to foster and sustain inclusive practices.

Based on the premise that shadow teachers do contribute towards inclusion, it would be useful to investigate the factors which predict the success of inclusive practices. Merely increasing personnel and support services to mainstream schools is inadequate to achieve effective and apt inclusive education (Armstrong, 2011); it is the quality of inclusion that is of importance. It is therefore important to realize that both external environmental factors as well as internal factors like child and teacher characteristics play a role in determining how well inclusive practices succeed. Child characteristics refer to internal factors in the child, while teacher characteristics refer to teacher background, knowledge and awareness, as well as teacher attitudes and role perception. External factors comprise of collaborative and planning practices, and support from the school and other important parties. Impeding factors which serve as challenges towards inclusion will also be examined.

2.5.1 Child Characteristics: Internal Factors in the Child

It has been proven that children who are uncooperative and with many behavioural problems present an obstacle to inclusive practices (Mesibov & Shea 1996; Odom 2000; Yianni-Coudurier et al., 2008). This also implies that the reverse is true; the better the child is functioning, the easier it is for the environment to be inclusive (Ho, 1997).

Internal factors in the child such as personality, behaviour, language and academic skills, etc, play a part in the quality of inclusion that he or she receives. Yianni-Coudurier et al. (2008) conducted a study to find out which characteristics of children with autism would influence their inclusion in regular classrooms and they discovered that the success of inclusive practices increased with age and daily-living-skill level but decreased when autistic symptoms or aberrant behaviors were more severe. Other studies have also concluded that children who are the most independent and with the fewest behavioral disorders, are the ones who are included in mainstream classrooms (Mesibov & Shea 1996; Odom 2000) while those with deviant behaviors such as irritability and uncooperativeness were excluded more. Eves and Ho (1997) further postulate that improving these behaviours was a reliable method to promote inclusion. For example, social skills training has been highly recommended as an effective instrument towards inclusion and social acceptance (Merrell and Gimpel 1998).

Stoutjesdijk, Scholte, and Swaab (2012) assert that academic performance has an impact on the success of inclusive practices. They further supported their findings by explaining that academic difficulties and underachievement are often ‘found to coincide with behavioural problems (Handwerk & Marshall, 1998; McConaughy & Mattison, 1994; Reid et al., 2004)’ (p. 99) which may lead to these pupils being placed in less inclusive settings.

Naess & Engevik’s (2014) study showed that children’s expressive language skills was an important factor determining the quality of inclusion because ‘difficulties – of varying degrees – found in this area may affect the children’s opportunities to exercise agency and influence their environment (Ahearn, 2001), which are crucial aspects of classroom inclusion (Farrell, 2004; Haug & Backmann, 2006)’ (p. 4).

It is hence apparent that child characteristics affect their ability to participate, interact and shape their environment, thereby either hindering or supporting inclusive efforts.

2.5.2 Teacher Characteristics

There are a multitude of teacher characteristics that affect the teacher's ability to effectively teach a child with special needs. These characteristics include personal background factors such as family history, financial background, educational background and career experience. Other teacher attributes include competency, teaching styles, patience, creativity, ability to nurture, self-efficacy in teaching, awareness towards inclusive practices and so forth. Due to the limited scope of this paper, this research will focus on the following characteristics: teacher awareness and knowledge about inclusive practices, background & training, attitudes towards inclusion, as well as understanding and perception of role.

Teacher Awareness and Knowledge About Inclusive Practices

The first prerequisite is that both mainstream and shadow teachers should have awareness regarding inclusive practices (Pivik, McComas, & Laflamme, 2002). Given that inclusion is a relatively new phenomenon in Singapore (Yeo et al, 2014), it cannot be taken for granted that all teachers know what inclusion entails and what it requires. The first step to achieving inclusion is contingent on the premise that the people who are responsible for implementing it even know about it in the first place. The success or failure of a policy hinges on how teachers interpret and understand the concept as that affects its execution (Barton & Armstrong, 2007).

Ideally, both the mainstream teacher and the shadow teacher should be aware about inclusion, and work towards making the environment inclusive for the pupils. Another advantage would be that due to the shadow teacher's presence and influence, the mainstream teacher would have more awareness about inclusion, and would take better care in ensuring that he/she establishes an inclusive environment for the pupils.

In addition to awareness about inclusive practices, knowledge is also required to effectively implement these practices, as skills and ideas are required to make adaptations to meet individual needs (Florian, 2000). Teachers also need to be adept at utilising a variety of innovative and flexible teaching strategies so as to accommodate pupils with diverse needs (Armstrong, 2011).

Teacher Background and Training

Dickens-Smith (1995) concluded that staff development is the key to the success of inclusion while Florian (2000) endorses that training and support are necessary for teachers to undertake the new roles and responsibilities associated with inclusive education. While shadow teachers go about their jobs, it is indisputable that their educational background and training serves as a backdrop and helping hand and influences how well they manage to carry out their duties.

Another reason that educational background and training is so important is the fact that knowledge about special education and training is also an important factor in improving teachers' attitudes towards the implementation of inclusive practices. Beh-Pajoo (1992), Dickens-Smith (1995) and Shimman (1990) found that teachers who had been trained to teach students with learning difficulties expressed more favourable attitudes and emotional reactions to students with special needs than did those who had no such training. It also goes without saying that the teachers with more training and thus competence in special education would have more favourable attitudes than those with less training.

Teacher Attitudes Towards Inclusion

Teacher attitudes and perception play a big role in contributing towards the success of inclusive practices in view of the fact that teachers are the ones who have the major responsibility for implementing them. It has been argued that teachers' beliefs and attitudes are integral in ensuring the success of inclusive practices, as teachers' acceptance and support (or lack thereof) for inclusion is likely to affect their commitment to implementing it (Norwich, 1994). It is thus crucial that both the mainstream and shadow teachers have positive attitudes towards inclusion, as the success of inclusive policies hinges upon the commitment and cooperation of those most directly involved (Avramidis, Bayliss, & Burden, 2000). Teachers (both mainstream and shadow) with supportive attitudes towards inclusion would be expected to welcome pupils with special needs into their classes and take responsibility in creating environments that are conducive to their learning.

Understanding and Perception of Role

Bronfenbrenner (1979) argues that ‘roles have magic like power to alter how a person is treated, how she acts, what she does and thereby even what she thinks and feels. The principle applies not only to the developing person but to the others in her world’ (p. 6). It is therefore evident that for a shadow teacher or teaching assistant to do his or her job well, he or she needs to first understand what his or her role is and where his or her responsibilities lie. Clearly defined roles and responsibilities have been linked to beneficial outcomes such as job performance, satisfaction and commitment (Dierdorff and Morgenson, 2007). Lorenz (1998) additionally recommended that the teaching assistants should be involved in the process of formulating their job descriptions.

Balshaw and Farrell (2002) affirm that ‘having clear job descriptions that can be applied within a flexible framework is one of the cornerstones of effective work of teaching assistants’ (p. 22). Other publications have further supported that for teaching assistants to do their jobs well, the expectations and responsibilities of their role have to be clearly defined (Moran & Abbott, 2002, Howard & Ford, 2007, Ghore & York-Barr, 2007).

On the other hand, role confusion arises when boundaries and responsibilities are not clearly specified (Butt & Lowe, 2011) and results in stress, uncertainty and frustration (Downing, Ryndak & Clark, 2000; Ghore & York-Barr, 2007; Howard & Ford, 2007), which could diminish classroom effectiveness (Thomas, 1992). It can be thus seen that clarity of roles and responsibilities are a critical factor in impacting the greater long-term goal of inclusive schools.

It would also be of interest to explore shadow teachers’ perceptions about their role, and to examine if they undertake the additional task of supporting inclusion, even if it were not formally required of them.

2.5.3 Collaboration

Collaboration is another important element that can have an impact on the success of inclusive practices (Rose, 2000; Clark et al., 1999). In reviewing shadow teachers’

experiences in contributing towards inclusion, it is also necessary to delve into the collaborative relationships that they have with the classroom teacher, the parents, other shadow teachers as well as other relevant professionals.

Collaboration with Mainstream Teachers

Shadow teachers need to work hand-in-hand with mainstream teachers to help pupils to realise their potential (ACS Athens, 2014). Literature pertaining to teaching assistants stress on the importance of collaboration and teamwork (Downing, 1996; Jerwood, 1999; Rose, 2000), and that teaching assistants should be part of a working team (Balshaw, 1999). ‘When teachers and other support staff are able to work together...problems associated with the severity of the learning difficulty and the relevance of the curriculum are diminished’ (Florian, 2000, p. 20).

Collaboration works both ways; it enables the shadow teacher to do the job better as he or she has a clearer picture of the child and it also helps the mainstream teacher better adapt the environment, which is a step towards an inclusive classroom. Collaboration enables inclusion to be successful even if some teachers do not have the expertise to meet the special educational needs of every pupil.

A key component of collaboration is when the main teacher and the shadow teacher work together in the planning of educational goals and activities concerning the pupil. This includes devising methods to achieve a more inclusive setting for the pupil. Pupils are able to work on individually adapted tasks of a similar nature when there is close collaboration between mainstream and special education teachers (Lorenz, 1998). Ripley (1997) concurs that the combining of expertise regarding content specialisation and adaptation specialisations allows the pupils to receive appropriate and tailored content and assignments such that each is ‘learning, is challenged, and is participating in the classroom process’ (p. 3).

Similarly, the working relationship between teaching assistants and teachers has been described in terms of collaboration, partnership and teamwork (Lacey, 2001), all of which imply joint planning and problem solving. In reality, however, not all TA’s are involved in the planning process (McVittie, 2005). Teachers have expressed the need for more non-contact time such that they are able to plan collaboratively (Diebold & von Eschenbach,

1991). The Groom and Rose (2005) study suggests that there may have been considerable progress in this area during the past two decades, and that teachers are involving TAs much more extensively in many aspects of planning and assessment.

Nevertheless, for all these benefits of collaboration to be enjoyed, the planning has to be on a regular basis such that teachers can evaluate progress, make adjustments and incorporate new ideas (Ripley, 1997).

Collaboration with parents

Collaboration and good communication habits between members of the child's support system are vital to achieving his or her target goals (Pivik et al., 2002). Good communication allows the parents to be updated about what is happening in school and provides a sense of security regarding their child. It has been found that parents are of the opinion that teaching assistants were essential to the education of their children and their inclusion (Ebersold, 2003). Communicative and meaningful relationships between the shadow teacher, the classroom teacher and the parents must be established and developed to meet the needs of the child (Vulliamy and Webb, 2003). However, Clark (1999) warns that problems regarding parental expectations can arise.

Support from the school

School support is another factor that has been consistently found to impact the outcome of inclusive practices (Janney, Snell, Beers & Raynes, 1995; Moran & Abbott, 2002).

Support at the classroom and school levels has furthermore been found to result in more positive teacher attitudes towards inclusive practices (Center & Ward, 1987; Myles & Simpson, 1989; Janney et al., 1995). This support refers to physical resources such as an adapted physical environment, special aids and teaching materials, IT resources and technology, as well as human resources such as supportive principals and colleagues, teaching assistants, special education teachers, speech therapists, and the like. In particular, supportive principals or headteachers have been found to be a significantly important factor in promoting positive teacher attitudes (Center & Ward, 1987, Chazan, 1994; Janney et al., 1995). Janney et al. (1995) found that support from the school (both physical and human) was

vital in reassuring teachers that they would not be dealing with heavy workloads alone and this reduced their reluctance to accept pupils with special needs in their classrooms.

Collaboration with other important parties

Collaboration with other shadow teachers is also beneficial. In the Janney et al. (1995) study, the respondents reported that one of the factors that contributed to the success of their programme was effective support provided by the special education teachers. Clough and Lindsay (1991) asserted that special education specialists and teachers provide useful advice to teachers on how to make a particular subject accessible to children with special needs. It is therefore constructive, and vital, that shadow teachers collaborate with other shadow teachers as well as special needs personnel so that they can receive support and advice, and so that there is a collaborative effort to meet the needs of the pupil (ACS Athens, 2014).

2.5.4 Additional Challenges

In the process of implementing inclusive practices, one would expect to encounter challenges. A significant challenge for shadow teachers is likely to be their presence resulting in the child feeling even more ‘different’ than his or her peers. Another problem might be over-reliance or dependence on the shadow teacher.

Research conducted by Marks, Schrader and Levine (1999) and Logan (2006) showed that, rather than facilitating inclusion, the assistants’ presence can create a significant barrier between the pupil and his or her peers and result in the pupil being treated differently to his or her peers (Marks et al., 1999). Similarly, a survey by Lorenz (1998) revealed that nearly half of teaching assistants sit next to one pupil most of the time and seldom help others, causing these pupils to become dependent and isolated from their peers. Other obstacles include the potential stigma for the pupil and the risk that they may develop a ‘learned helplessness’ (Ainscow, 2000; Rose, 2000). Some teaching assistants had the tendency of ‘spoonfeeding’ and ‘doing too much’ for some children, thereby removing the challenge of a task from them, despite having the best of intentions (Moran & Abbott, 2002). These issues will be further explored in Chapter 4 of this paper.

3 Methodology

3.1 Introduction

The purpose of this study was to explore the factors affecting inclusion in Singapore schools, from the perspectives of shadow teachers. This chapter presents the research methodology and provides a description of the qualitative research design, as well as the logic behind its selection (3.2). Data-collection procedures (3.3) such as purposeful sampling will be discussed and the next sub-chapter (3.4) will look at semi-structured interviews as a research method. Subsequently, data analysis based on a hermeneutic approach (3.5) is discussed. The chapter is concluded by discussing issues of validity and reliability (3.6), as well as ethical considerations (3.7).

3.2 Qualitative Research design

This is a qualitative study based on semi-structured interviews. A qualitative research design was chosen as qualitative research involves an ‘interpretive, naturalistic approach’ (Denzin and Lincoln, 1994, p.2) and focuses primarily on human experience through exploring attitudes, beliefs, values and experiences. This allowed the researcher to accurately understand and portray the experiences of shadow teachers, taking into account the context and their personal circumstances. Qualitative research provides flexibility for the researcher to explore topics as they emerge and it enables participants to shape the research direction and to share their views freely (Cresswell, 2012). This enables the researcher to develop an in-depth understanding so as to be able to form an overall picture from the data gathered (Creswell, 2009).

This study could also be considered an exploratory one as few or no other studies have been published on shadow teachers in Singapore and thus the researcher ‘seeks to listen to the participants & build an understanding based on what is heard’ (Cresswell, 2009, p.29).

3.3 Data-collection Procedures

The process of data collection commenced in August 2014 and lasted till January 2015. This included the process of obtaining permission for the study as well as sampling procedures.

3.3.1 Obtaining Permission

An application for a permit to start data collection was sent to the NSD (Norwegian Social Science Data Services), who after some assessment, concluded that the study need not be subjected to notification according to the Personal Data Act as it contained only ‘anonymous information’ (See Appendix 3). This served as confirmation that I could begin my data collection.

3.3.2 Purposeful Sampling

Purposeful sampling was used for the recruitment of participants for this study. It involves selecting research participants according to the needs of the study (Glaser & Strauss, 1967; Morse, 1991) so that participants who are able to give a richness of information that is suitable for detailed research are chosen (Patton, 1980).

6 shadow teachers were selected from 3 different companies offering shadow services in Singapore. These companies hire and train experienced and qualified individuals, and are currently offering their services to pupils with special needs studying in mainstream schools. In qualitative studies, samples are typically small and based on information needs (Maxwell, 2005). The small sample size was chosen because of the potentially detailed data and in-depth inquiry that could be derived from each participant. Criterion sampling was used to allow the researcher to select only participants who satisfied important criteria and were relevant to the study (Gall, Gall & Borg, 2007).

The 6 participants were selected based on the following inclusion criteria: 1) they had to be shadow teachers who were working with children with special needs in Singapore schools, and 2) they had to have at least 1 year of experience working in this field. Six shadow teachers who were willing to participate in the study and who met the inclusion criteria were

selected. These shadow teachers were selected from different companies so that their different experiences and different work practices could provide diverse and useful information and insight into shadow teaching.

3.3.3 Introduction of the Participants

All six shadow teachers who participated in this study were females and ranged in age from 24 to 43. They had between 2-5 years of experience in shadow teaching. Five of the shadow teachers had bachelor's degrees in disciplines such as Psychology, Early Childhood Education and Child Psychology, and one of them had a diploma in Special Needs Education. All of them have had experiences working with children with special needs before starting their careers as shadow teachers.

3.4 Research Methods

The goal of this study was to find out more about shadow teachers' experiences, and in particular, the factors and challenges influencing inclusion in Singaporean schools. Qualitative semi-structured interviews was my method of choice. This method was chosen because the semi-structured interview allows for 'an element of structure without compromising the participant's freedom to elaborate on topics of interest to him/her' (Bryman, 2004, p. 321). This enabled me to have an outline of topics to discuss yet still be able to explore the other topics brought up by the shadow teachers; their experiences – both good and bad, hopes, worries, challenges and outlook. This method also allows for flexibility and it allows things to be explored in a great amount of detail. However, it is also expected to be time-consuming due to the open-endedness of the data (Kvale & Brinkmann, 2009).

3.4.1 The Interview Guide

An interview guide (see Appendix 1) was used for the interviews so that the researcher would be able to best allocate and utilise the limited time to elicit the relevant information, and so as to keep track of the topics that had already been discussed. The interviews centered on 3 major themes: (1) Factors Influencing Inclusive Practices, (2) Inclusive Education in Singapore and (3) Shadow Teachers' Experiences and Challenges.

The first theme (Factors Influencing Inclusive Practices) examined factors such as child and teacher characteristics, as well as collaboration between shadow teachers, mainstream teachers, parents and other important parties. Here I wanted to explore how each of the factors affected inclusion. The second theme (Inclusive Education in Singapore) served to elicit information regarding the current state of inclusion in Singaporean schools. Questions relating to different aspects of inclusion (participation, belongingness, etc.) were asked, so as to get an idea of the extent of inclusion in schools. The third theme (Shadow Teacher's Experiences and Challenges) enabled the shadow teachers to bring up issues and anecdotes that were relevant to the study. To conclude the interview, the shadow teachers were asked for their input regarding suggestions for improvement and their concluding thoughts (if any).

The interview guide was structured in a way that would feel natural for the shadow teachers. In other words, the questions were sequenced in such a way that would allow the conversation to flow naturally – for example, it starts with questions about the job description so as to allow the shadow teacher to warm up, before moving on to the topic of inclusion and its influencing factors. Clearly, it was unavoidable that the shadow teachers started to talk about other topics that were further down on the interview guide. To avoid repetitive topics, I perceived the interview guide as a fluid instrument that could be rearranged easily when the need arose. It served its function – to be a 'guide' as opposed to an unalterable script.

3.4.2 Pilot Study

A pilot study was conducted a month before the actual data collection so as to ensure that the interview guide was applicable and useful, and also to determine the approximate length of the interview. The reasons for conducting the pilot study were compelling – to carry out a 'preliminary investigation' (Gall et al., 2007, p.648) in order to ensure the quality and methodological soundness of the instrument (Yin, 1994). It was intended that the pilot study would result in useful feedback and that it would be able to identify potential problems. A shadow teacher who satisfied the inclusion criteria stated in Section 3.3.2 was selected for the pilot study.

The pilot study was subsequently carried out, and proved to be enlightening. Firstly, it gave me the chance to evaluate the content of the interview guide and the way the questions were

phrased, as well as my usage of language and probes (see Section 3.4.3). Questions which were too long, or ambiguous were revised and helpful key words were added to the interview guide. An added bonus was that the pilot study enabled me to familiarise myself with the interview questions and to practise my interview skills. I was also able to test the data-recording devices that I was planning to use for the actual data collection. I used an audio recorder for the pilot study but decided on using an additional recording device for the main study for security's sake. This was due to my decision not to take down written notes during the interview (even though it was advisable to do so), as it proved a distraction and it was difficult to ask questions and write down answers at the same time, even with the use of shorthand and abbreviations (Cresswell, 2009).

3.4.3 Interview Procedure

The interviews were carried out at a quiet, suitable location free from distractions (Cresswell, 2012), and varied in length from approximately 55 minutes to 1 hour and 30 minutes. The revised interview guide was used and the interview was recorded using an audio recorder as well as the recording function on a smartphone.

The interviews were informal and flexible, and carried out in a conversational style. The purpose of the study was once again explained to the participants (they had been given this information once before, when recruiting participants for the study) and the informed consent forms were signed. Participants were also reassured of the confidentiality and anonymity of the research data (Gall et al., 2007).

During the interview, I made sure that the topics stayed relevant but that the participant was able to express her thoughts freely. In line with Cresswell's (2012) advice, I endeavored to be a good listener. Probing questions were also asked throughout the interview, to ask the participant to elaborate when she did not offer enough information, and to ask her to clarify any vague responses (Cresswell, 2012; Gall et al., 2007). At the end of the interview, the participants were thanked for their participation and time, and once again reassured of the confidentiality of the data.

3.5 Data Analysis

Before data analysis could commence, the interviews had to be transcribed into written notes. The audio recordings were transcribed verbatim using Microsoft Word and each transcript was labelled with a number in order to secure the anonymity of the data. Identifying information such as names of schools, companies, teachers or pupils were emitted from the transcripts.

The data was analysed using a hermeneutic approach, which involved going back and forth to interpret and relate the meaning of what was said, to the whole interview context; also known as a hermeneutic circle (Kvale & Brinkmann, 2009).

Each of the transcripts was read once to get an overview before any coding was done. Thematic coding was then carried out. Data was examined and categorised under pre-determined themes, which were derived from the research questions beforehand. These were *organizational* categories, or *topics* (McMillan & Schumacher, 2001) and were anticipated based on the sub-questions and sub-themes before the interview was carried out. They included categories like ‘Child Characteristics’ and ‘Collaboration with Parents’.

Following that, open coding was carried out; significant statements, ideas and phrases were extracted from transcripts. Meanings and themes were then formulated from these statements and further organized into categories. Data was coded into *substantive* categories, which were descriptive in nature and described the participants’ opinions. Examples of substantive categories were ‘Successful collaboration with mainstream teacher’ or ‘High parental expectations’. These categories included *emic* ones (which were taken from participants’ own words) as well as *theoretical* categories, which were *etic* in nature (based on the researcher’s own understanding). An example of a theoretical category would be ‘School culture poses a challenge to inclusion’.

Maxwell (2005) proposes that it is important to create substantive categories, especially for data that does not fit into existing organizational or theoretical categories, so that they do not go unnoticed and unanalysed. According to Strauss (1987, p.29), the goal of coding is to ‘fracture’ the data and rearrange it into categories that facilitate comparison between things in

the same category and between categories. Maxwell (2005) states that “such categorizing makes it much easier for you to develop a general understanding of what is going on, to generate themes and theoretical concepts, and to organize and retrieve your data to test and support these general ideas” (p. 24).

3.6 Reliability and Validity

3.6.1 Reliability

While the credibility in quantitative research depends on instrument construction, in qualitative research, ‘the researcher is the instrument’ (Patton, 2001, p. 14). To secure reliability in my research, I made sure to inform and to educate myself about the research techniques because the researcher’s knowledge and skills affect the credibility of the study. During the interviews, I ensured that I was consistent in asking the questions in the same manner and wording to all participants and that I was careful not to ask any leading questions. During the process of data analysis and writing, I took extra care to ensure as far as possible that the findings were the result of the experiences and ideas of the participants, rather than the characteristics and preferences of the researcher. This included re-reading the transcripts multiple times to ensure that the interpretations were accurate and that meanings were neither lost nor altered.

3.6.2 Validity

Validity determines whether the research truly measures what it was intended to measure or how truthful the research results are (Joppe, 2000). To achieve validity, I made use of iterative questioning, which involved asking rephrased questions referring to opinions and ideas previously articulated by the participant, so as to see if there were any contradictions in participant accounts. I also made use of probes to elicit more detailed information, which enabled me to have a better understanding of what the participants meant. As mentioned in Section 3.6.1, it was also important that I did not impose my own perspectives onto the research, rather than the experience of participants.

3.7 Ethical Considerations

Cresswell (2009) mentions that the researcher must anticipate any ethical issues that may arise during the qualitative research process, especially for research involving collecting data from people, about people (Punch, 2005).

The following protocol was followed to protect the participants' rights:

1. Participants were informed in writing of the voluntary nature of their participation and that they had the right to decline to answer any questions or withdraw from the study at any time without penalty.
2. The research objectives and data collection methods was clearly outlined in writing and also verbally explained to the participants before they were asked to sign the consent form. (refer to point 3)
3. Each person who agreed to participate was asked to read and sign an informed consent form (see Appendix 2) prior to participating and was promised their complete anonymity. Pseudonyms were given to each participant and care was taken to ensure that data published in the study would not be linked back to any participant or any school in particular.
4. Information that was sensitive or had the potential to identify any pupil, parent, teacher or school was protected appropriately.

4 Presentation of the Data

4.1 Introduction

This chapter discusses the findings and presents the data in themes and sub-themes which emerged after the analysis of the interview transcriptions. Inclusion (4.2), child characteristics (4.3), teacher characteristics (4.4), collaboration (4.5) and other challenges (4.6) will be discussed. For the sake of anonymity, the shadow teachers' names have been omitted and they will instead be referred to as **ST** (Shadow Teacher) **1 – 6** respectively.

4.2 Inclusion in Singaporean schools

The shadow teachers were asked questions which served to shed some light on the situation regarding inclusion in Singaporean schools. Their answers helped to give a rough picture of the extent of inclusion present in classrooms.

All the shadow teachers reported that their pupils were taken out of the classroom very minimally, or only when a situation arose, such as in the case of a tantrum or meltdown. Otherwise, their pupils spent the rest of the time in the class with the others and participated to the best of their abilities.

ST 1 shared that during group activities, if it was too noisy or if the demands of the task were too high for the pupil to participate, she would focus on the aspects that he was better at (for example, being a timekeeper to keep track of the time or to come up with ideas for one particular part). *'We will facilitate that part so that he can contribute to the group, but it's still within his ability and he would not have a meltdown'*.

When asked if the pupils felt like they were part of the class and that they belonged, most of the shadow teachers were of the opinion that they did. ST 1, ST 3 and ST 4 shared that their pupils were excited and happy to be with their classmates and were included by their peers. They mentioned however that it took some time for the peers to accept them and that before the shadow teacher's arrival, some of the peers were 'very scared of him'. It took some time

and effort on the shadow teacher's part to get the peers to understand and to make it a point to include the pupil.

ST 3 and ST 5 however, reflected that these pupils could be quite lonely sometimes as they were 'left out' and some of them had no friends. ST 5 mentioned that some of the peers were more accepting when she explained the situation but that they would forget it after some time and she would have to remind them constantly. ST 4 added that for certain pupils, they did not have the awareness to realise that they were not well-liked among their peers. *"He doesn't have the social skill and understanding to pick up on facial expressions or to pick up on behavioral cues of the people around him. He thinks that everybody likes him"*.

Most of the shadow teachers reflected that their pupils were performing better at school and that there had been a lot of improvements since the shadowing started. ST 3 claimed that without a shadow teacher, the pupils with special needs might spend more time outside the classroom with the Allied Educator. Other shadow teachers also stated that some schools were unwilling to continue to take on their pupils unless a shadow teacher was hired.

4.3 Child Characteristics

When asked if child characteristics were an important factor in inclusion, the majority of the shadow teachers were of the opinion that it played a part in influencing the quality of inclusion the child receives and the ease with which he or she is included. ST 1, ST 3 and ST 5 maintained that the severity and type of the learning disability affects the success of inclusive practices. ST 1 and ST 3 believed that if the learning disability was severe, there would be a high need for the individualization of the pupil's learning and that he/she would be 'heavily dependent'. Thus, even if the environment was inclusive, it would not be very beneficial for the pupil. They replied that they would still help to 'integrate and include' the pupil but remarked that practically speaking they felt it would be 'impossible'. ST 5 added that 'high-functioning' pupils participated very well whereas 'low-functioning' pupils needed more assistance and help and did not participate as well.

ST 3 went on further to elaborate that the social skills and the type of learning difficulty makes a difference. She claimed that for pupils with autism, involvement is 'pretty much

non-existent' because they are 'happy just being on their own'. On the other hand, she has experienced that pupils with dyslexia and ADHD are able to participate more willingly and that their classmates were unaware of their diagnosis. *"They [the classmates] almost see them as normal as opposed to those children with autism where they clearly know that they are different"*.

As for the social aspect of making friends and belonging, ST 1 shared that some pupils lacked the motivation to make friends and that they were fine with having no friends. *"But education in school also entails learning social skills, and interacting with friends is actually quite a crucial part, if not you can just learn at home. So for some, you really have to use very different ways to motivate them to talk to friends"* (ST 1) while on the other hand, ST 3 and ST 5 shared that children with outgoing personalities participate better and carry out conversations with their friends and adults as well.

ST 4 provided an example that the personality of the child influences his likelihood of successfully being included. She pointed out that her pupil had the habit of telling on his classmates. *"When his behaviours get you in trouble you don't really want to be friends with someone like that."*

ST 1 also contributed that the success of inclusive practices hinges on the child's motivation: *"For some kids they are very aware, and they know that they need some help. Then they may be more motivated to change their behaviours or to attempt little changes"*.

ST 6 on the other hand, believed that it is the environment that is more important and that the success of inclusive practices depends on 'the people allowing inclusion to happen' (referring to the teacher and the other pupils in the classroom).

All of the shadow teachers indicated that the length of the shadowing period – how long it takes before the shadow teacher is able to include the pupil – depends on the pupil's characteristics. *"So the fastest we took was within a year, where we faded at the end of a year, but there are cases where we are still not fading off after 3 years. So it depends on the child's level and other aspects"* (ST 1).

4.4 Teacher Characteristics

4.4.1 Teacher Background and Training

Shadow Teachers' Background and Training

The shadow teachers in this study had 2-5 years of experience in shadow teaching and 3 of them have Bachelor Degrees in Psychology (ST 1, ST 3, ST 5), 1 in Child Psychology (ST 2), 2 in Early Childhood Education (ST 2, ST 4) and 1 has a diploma in Special Needs Education (ST 6). All of them have had experiences working with children with special needs before starting out as shadow teachers.

Regarding on-the job training and guidance, most of the shadow teachers have case managers and colleagues who offer feedback and guidance regularly. ST 1 stated that a case manager usually accompanies the shadow teacher for the first 2 weeks of shadowing, doing the actual shadowing for the first week while the shadow teacher observes and learns, and providing feedback during the second week while the shadow teacher takes over.

As for additional development and training, ST 1, ST 5 and ST 6 related that they were satisfied with the number of workshops and courses they were sent to. ST 6 remarked, *“They have constant updates like you know how the special needs industry always has something new and everybody has a different way of teaching, so we always update ourselves”*.

ST 2, ST 3 and ST 4 however, did not think that the amount of training was enough. ST 3 conveyed that she sometimes felt frustrated because she felt like she could do more for the child – *“but what could I possibly do? Because I didn’t really have enough proper training. That was very very tough”*.

Mainstream Teachers' Background and Training

The general consensus among the shadow teachers was that the mainstream teachers did not have sufficient training and background in Special Education.

“I think they have a 1 day workshop or something, about what to expect from kids with autism, etc., but it’s a very surface level of understanding. Some of them they just know the name. They don’t know why the kids are behaving like that” (ST 1).

“They say they are trained in Special Needs Education. But from the way they react, I guess they were taught ‘by the book’ but they do not really understand it. They don’t really understand why this kid is doing what he is doing” (ST 6).

ST 2, ST 4 and ST 5 claim that the teachers they worked with were not trained in SNE while ST 3 remarked, *“I do know that the teachers get sent on these courses and they get certified as TSNs, Teachers trained in Special Needs. They are quite short, like 3 days’ worth of courses, but some teachers find it useful and they say that it is very relevant”.*

4.4.2 Teacher Awareness and Knowledge about Inclusive Practices

The shadow teachers were asked questions that were aimed at finding out their level of awareness and knowledge about inclusion and inclusive practices. They were asked to define inclusion and questions that focused on their knowledge regarding implementing inclusive practices in the classroom were also asked.

The majority of the shadow teachers understood what inclusion entails – albeit some more than others. ST 1 and ST 2 had a elementary definition of inclusion, which bordered a little bit towards the definition of integration – *“That every child has a right to have an education regardless of his special needs, alongside his peers” (ST 1)* and *“despite his special needs we still put him together with other typical kids and they interact together in the same environment” (ST 2).*

ST 5 and ST 6 however, had never come across the term inclusive education. They pondered a bit before making guesses that inclusive education meant to ‘include the students in normal environments’ and them ‘not being left out’. It is interesting to note that ST 6 had never heard the term ‘inclusion’ despite having a diploma in Special Needs Education.

ST 3 and ST 4 were quite familiar with the term inclusion and defined it as “*mainstream education that is tweaked to support all different types of learners*” (ST 4) and “*on top of that I think that everyone must be accepting and receptive towards that child*” (ST 3).

“It’s not like changing the kid to fit into the school, it’s more like the school being able to...you know... maybe the principal could be like ‘What can I offer to help this child?’ instead of pushing it to external agencies like shadow teachers” (ST 3).

ST 4’s definition of inclusive education was a flexible learning environment that accommodated different types of learners (not necessarily referring to someone with a disability) and that “*the environment refers to everything. Everything in the environment, from your teaching methods, your teaching materials, your lesson itself...the content of the lesson. You can have the same learning goals, but for different learners, you have different ways of presenting the information*”.

One interesting thing to take note of was that although ST 3 and ST 4 defined inclusion quite precisely, taking into account the pupil’s participation, belongingness, teachers’ awareness, and the fact that the environment is the one that has to change to accommodate the pupil, they used the term ‘integrate’ – “*to integrate successfully and comfortably in a mainstream environment*”. This phenomenon was observed with the other shadow teachers as well and will be further discussed in Chapter 5 (see Section 5.2.2).

Regarding knowledge about inclusive practices, all of the shadow teachers have implemented inclusive practices (some more than others) in the classroom on a regular basis – even if some of them had not been aware that those strategies were inclusion-based.

ST 4 stated that she had quite some knowledge about implementing inclusive practices as she learnt about creating inclusive learning environments in university and had to come up with an inclusive curriculum as one of her graduating projects. ST 5 on the other hand, answered that she did not have any knowledge implementing inclusive practices. She expressed that she was not allowed to change the physical environment in school but that she usually simplified instructions for her pupils so that they could understand better.

Some common inclusive strategies mentioned by the shadow teachers were: the increase usage of visual material, clear setting of rules and regulations, positive behavioural support, flexibility in schedule and homework/tests requirements, decluttering of the environment, getting the other pupils to understand and include them and so forth.

Contrarily, according to the shadow teachers, it seemed like the majority of the mainstream teachers did not implement inclusive classroom practices. In addition, ST 5 shared an anecdote, which she believed showcased a lack of awareness on the mainstream teacher's part.

"Sometimes, if the kid is crying, I explain 'Maybe he's anxious because it's the first time he's encountered this issue or there's a sudden change in schedule.' But the teacher doesn't really understand and says, 'Oh, why [is he] so whiny? Why does he keep on crying? Sometimes they just scold him like, 'You're lazy! Why are you so lazy? Why don't you learn well?' I try to explain but the teacher will say that he is naughty'".

She was visibly upset while narrating the episode. She vocalised that the mainstream teachers should put themselves in the shoes of their pupils with special needs and try to understand and help them, instead of 'stressing [them] to fit into her teaching style'. When questioned if the mainstream teachers knew that the particular pupil was diagnosed with autism and whether they learnt what the diagnosis entailed, she replied that one of them tried reading up about autism to see why he was behaving the way he did. She described that the teacher initially 'changed' her perspective and 'kind of accepted' him, but after some time went back to 'putting pressure on him'. She stated that she did not think that the other mainstream teacher learned about autism. ST 2 and ST 3 shared the same sentiments that there was a need to raise awareness about inclusion.

4.4.3 Teacher attitude towards Inclusion and Inclusive Practices

Most of the shadow teachers had a positive attitude towards the concept of inclusion but some of them expressed certain reservations. In general the shadow teachers supported inclusion but with regards to pupils with severe intellectual disability, or those who were moderately autistic and non-verbal for example, they were concerned that inclusion would

not be feasible “*because of the language and academic expectations that mainstream schools demand*” (ST 1).

ST 5 described her attitude towards inclusion as ‘between positive and neutral’ because she felt that the class size was too big for the teacher to change solely to accommodate the pupils with special needs. “*And because the ratio is like fifteen-to-one, then—my student, there’s only one student. Then fourteen of them have to change to fit him. I think the teacher is not willing to do that*”.

ST 6 was positive about the concept of inclusion but was less optimistic about its realization: “*I don’t think it’s going to happen, inclusive education. I wish it would happen one day. It’d be great, it’d be amazing for shadow teachers like me*”.

All the shadow teachers however, had positive attitudes towards implementing inclusive practices in the classroom. ST 1 remarked that it would “*decrease a lot of behavioural issues even for the ‘normal’ pupils*”. But almost every single one of the shadow teachers conveyed that the success of the implementation of inclusive practices was dependent on the receptiveness of the mainstream teacher and that “*in order for it to be effective, there has to be a lot of partnership between teachers and the people that are supporting the child*”. (ST 2)

Mainstream Teachers’ Attitudes towards Inclusive Practices

The mainstream teachers were not directly interviewed to find out what their attitudes towards inclusive practices were. However, the shadow teachers were asked if the mainstream teachers made any effort to implement inclusive practices and their answers provided some insight into the topic. It must be stated that this was solely from the perspective of shadow teachers and did not represent the actual attitudes of mainstream teachers.

According to ST 5, one of the mainstream teachers did not put in any extra effort to adapt the class curriculum or her teaching style for the pupils with special needs but instead “*wants the students to fit in her environment*”. On the other hand, ST 6 expressed that she was under the impression that the school did not ‘allow’ mainstream teachers to make modifications and that the teacher felt that it was ‘too much work to change something for one kid’.

However, some mainstream teachers did introduce some modifications (for example to allow a pupil to make a model instead of writing a 5 page report) but it *“depends on the school and how willing the teacher is to make such changes. Because for a lot of things they still want conformity”* (ST 1).

4.4.4 Shadow Teachers’ Understanding of Role

When asked what their job description was, all of the shadow teachers described their role without any uncertainty and they had a good grasp over what being a shadow teacher entailed. They stated that they were responsible for helping the pupil to ‘integrate’ into the mainstream environment, providing academic and behavioural support, improving social interaction skills, and that they had to work closely with the parents and the school. All of the shadow teachers mentioned setting goals before the shadowing starts, and that their job was to work towards achieving those targets.

ST 4 related that she was usually given a report identifying the pupil’s needs, but that she would have to observe further to see what additional triggers there were in the environment and to spot things which her case manager might have missed out on. They then worked together to come up with strategies to put in place for the pupil, liaised with the teachers, introduced lesson and test modifications, as well as monitored the progress of the pupil.

ST 1 described the definition of her role as ‘fairly clear’, while ST 5 indicated that her case manager would provide guidance and instructions at the beginning.

However, some of the shadow teachers felt that the detailed job scope, specific responsibilities and boundaries were not clearly stipulated and that shadow teachers could benefit from more guidelines so that they could do their jobs more effectively. ST 2 described it as an ‘on-the-job kind of thing’ and recalled that she had to ‘figure things out’ herself, and ST 4 had the same sentiments: *“At the beginning, my first client, they told me what to do, but gradually, by the second week, I had to figure on my own things that I need to do. There’s a lot of self-learning, independent learning”*. ST 3 suggests that the most important thing is to

have a ‘set protocol’ because it *“really helps to get the ball rolling and helps us to do our job better”*.

ST 6 had a diverse group of pupils and mentioned that for her, there was ‘no specific thing’ and it depended on what the shadow teaching company focused on (behavioral aspect, academic aspect, other/all aspects). Her pupils were of different ages ranging from 4 to 17 years old and had very different needs. Some required home therapy where they focused on basic day-to-day skills like cooking, while some required solely school support.

When asked if their job description focused on inclusion, most of the shadow teachers answered that it did not, with the exception of ST 4 who answered that it did. However, most of them used the term ‘integrate’ quite often throughout the whole interview, including ST 4.

When asked if the job description used the word ‘integrate’, ST 1 replied *“Yes, they use that word. It’s quite important”*, while ST 3 declared that, *“[Integration] is the main goal. Just to help them to adjust to life in their school, and make sure that they are well-liked by their peers and included by their peers, especially for kids with autism”*.

ST 4 also used the terms ‘inclusion’ and ‘integration’ interchangeably.

“I have to help find ways to integrate that child into that environment, not just in school but also socially.”

“It’s really big on integrating. It’s the whole point of my job, so that the child is no longer isolated from everyone else. So when the boy is not there, the students are going to be asking where he is. Because he’s a part of the class also.”

“Sometimes the task that is given to them kind of sets them up for failure. So on my part, I break it down for them. Smaller achievable tasks that will gradually build up into something harder and harder. As it gets harder, they will have a tendency of giving up, but my role is to build up that perseverance, confidence, let them know even though it’s hard, we will work towards that goal, but it’s just that we’ll take more steps. My job to help them, to include them into the environment is to create those steps for them” (ST 4).

Notably, ST 6 responded that after the researcher explained what inclusion meant, she realised that her job description did focus on inclusion, even if that word was not specifically mentioned. In addition, she mentioned that even though her job scope did not entail helping the other pupils in the classroom as well, she realised that while modifying the environment to suit her pupil with special needs, the other pupils also benefited and learnt better.

4.5 Collaboration

4.5.1 Collaboration with Mainstream Teachers

When asked about the collaboration with the mainstream teachers, the shadow teachers had mixed responses. Some had positive experiences but the general consensus was that the situation was less-than-ideal.

ST 1 conveyed that she tried to speak to the mainstream teachers as much as she could, providing daily updates regarding pupil progress and asking for their opinions and suggestions. She is determined to include them in the process because *‘they must still have a say’* and because she wants to ensure that the mainstream teacher can manage the pupil’s behaviour when the shadow teacher will no longer be around. She added that when mainstream teachers are very passionate, they implement many changes and the impact can clearly be seen – fading happens faster and the pupil *‘relates more to the class and his classmates’*. She recalled that she has worked with teachers who were very helpful, understanding and supportive, and they were able to cooperate and implement strategies to help the pupil. *“Even though this kid didn’t have a diagnosis, they really made an effort to understand him. Once in a while, you get some really passionate teachers”* (ST 1).

On the contrary, many of the shadow teachers narrated instances where mainstream teachers were not receptive to their strategies or unsupportive of the shadowing. ST 2 maintained that she needed to help some teachers to understand the pupil’s diagnosis as they *“always expect a quick change, that the child will improve within a month, but it takes time”*. She mentioned that she was doing most of the supporting and that the mainstream teachers did not participate much. When asked if the mainstream teacher put in any effort to adapt the class curriculum or

the environment for pupils with special needs, ST 2 replied that the shadow teachers were the ones who brought in extra materials and learning aids for the mainstream teachers to use with the pupil. However, the teachers were not very receptive and did not use the materials much. She was of the opinion that shadow teachers required more support from the mainstream teachers as they would be unable to fade off if the mainstream teachers do not step in to help the pupil.

ST 5 recalled that although she had regular communication with the teachers as she would update them after the lessons about the pupil's progress, one of her biggest challenges was having to deal with an aggressive pupil on her own when he had one of his tantrums because the mainstream teachers would "*scold and be rough to him rather than explain why he cannot get what he wants*". She lamented that she felt that the support was 'not there'.

ST 1 explained this lack of support by putting forth the argument that some mainstream teachers had the mindset that inclusive practices were specific to the pupil with special needs and that it would not benefit the other pupils and was 'a hassle'. She proposed that mainstream teachers needed to be convinced that inclusive practices would benefit all students, not just those with special needs. She declared that the main challenge she had to face was 'getting the teachers and the school on board'. She pointed out that it would be easier to get the peers to cooperate if the teachers were willing to collaborate.

ST 3 reflected that she would like to see the mainstream teachers showing more interest and concern in helping these pupils instead of 'giving up so easily' and being unreceptive to implementing inclusive practices in the classroom. She related that she usually tried to change the environment to make it more conducive for her pupils but that she had to seek approval from the mainstream teacher if she wanted to change a classroom setting. "*So then there is always an issue there if like I said, the teacher is not receptive. If I had a choice, yes, for sure!*" Following that, she mentioned that when mainstream teachers were not receptive to the shadow teachers' intervention strategies, it was 'extremely difficult' but that "*ultimately it is the teacher's decision at the end of the day, so we will have to respect his or her decision*".

ST 4 on the other hand claimed that if shadow teachers were firm and insistent about getting the support they need, it would make inclusion easier. She mentioned that the mainstream

teachers usually left her on her own, unless she approached them about modifications for subject content or tests. In those cases they worked together to decide if the modifications were suitable for the pupil. She added that they were receptive to adapt the curriculum, environment or teaching styles when she pushed for it.

“So I will have to ask them in advance, “What are you going to teach? What are the concepts? What are your learning goals?” and they will have to share them with me. And then we will discuss what is appropriate for him. But I have to be active in asking them or pushing them for it” (ST 4).

Planning

Most of the shadow teachers disclosed that they were not included in the planning process enough. None of the shadow teachers were included in the planning of lesson plans. They were however, included in discussions regarding the setting of academic and behavioral goals and modifications of IEPs (for the pupils who used them) and other modifications.

“With modifications – yes. But lesson plan, for the whole lesson plan, it’s up to her. I just come in to support” (ST 4).

Researcher: Does the mainstream teacher involve you in planning lesson plans or her classroom activities? Does she ask for your opinions and input?

ST 5: No. Not at all.

ST 2 explained that the mainstream teachers were extremely busy and that was the reason they seldom had time to sit down and discuss the pupil’s progress. She shared that they had to be the ones to approach the mainstream teachers as the teachers were unlikely to ask about the pupil or to check on his/her progress. They communicated once every 2 weeks.

Term meetings (once a semester) on the other hand, were quite usual for all of the shadow teachers. In such meetings, the shadow teachers, mainstream teachers and other involved parties discussed whether things were working out and came up with detailed strategies: how to structure homework, what prompts and learning aids to use, what the shadow teachers should focus on during home therapy and so forth.

Teacher Responsibility

One other topic which surfaced during the interviews was the issue of teacher responsibility. Some mainstream teachers had the tendency to view the pupil with special needs as solely the shadow teacher's responsibility. All six shadow teachers, at some point during their interview, mentioned similar accounts of mainstream teachers leaving the pupil to the shadow teacher and expecting them to take over.

"Sometimes they feel that they cannot cope with him, so when we come in, they will just 'chuck' him to you, that's one scenario" (ST 1).

"I'm seen as an extra pair of hands so they just chuck everything at me and expect me to do everything on my own" (ST 3).

ST 1 and ST 4 recalled that some mainstream teachers were anxious when the shadow teachers wanted to initiate *fading* (see Chapter 2.4) as they wanted them to stay with the pupil for a longer period of time. ST 4 explained that the mainstream teacher was extremely against her fading out because she knew that she would have to manage the pupil on her own when the shadow teacher was gone. ST 3 however, recalled that the mainstream teachers with whom she has worked started to put in more effort to include the pupil when fading began and to make sure that everything would be fine without her presence in the classroom.

ST 1 suggested that shadow teachers needed to be more aware about how they should facilitate the shadowing to ensure that the mainstream teacher was still interacting with the child instead of placing all the responsibility onto the shadow teacher. ST 6, on the other hand, suggested letting the pupil get used to approaching the mainstream teacher for help:

"They just forget about this kid, because they know that there's another pair of eyes solely for this student. So they don't go up to the student and say, 'How are you doing? Are you okay? Do you need help?' Sometimes I have to teach my student to go up to them and ask instead of waiting for me to help him. But I try to inculcate that he still needs to ask the teacher, because I will not always be there".

Tension among Authority Figures

Another issue, which emerged from the data collected, was that of tension between the shadow teacher and mainstream teacher. ST 6 described one of the challenges that she was facing as *“being in someone else’s territory”*. She elaborated: *“Because we are usually an outside vendor, we are not from the school, and to have another adult sitting and—basically I’m like one of the students, but a bigger version of a student, like the adult version. And I usually stay inside the class and listen and also learn from the teachers and also for them to hopefully not to feel judged by me?”*

ST 1 shared similar sentiments:

“Sometimes when you try to help, you’re not sure if you’re actually interrupting the teacher, or if you are being intrusive to how the lesson is supposed to flow. In some ways, because we are kind of externally employed...the way the teachers see us...it’s like you’re just someone there and the role that you are playing is not clear-cut enough and sometimes you may tread on someone’s toes without knowing it. The second scenario is that they will feel intimidated, because they feel like they are being watched by someone”.

She goes on to explain that this is due to the culture. *“For the Singapore government schools, when another teacher comes in, it’s usually to grade the other teacher. So there is a stigma associated with it”*.

Some of the shadow teachers attributed the tension and animosity to the age of the teacher. ST 1 stated that the younger teachers were more receptive while the ones with more seniority did not feel that the shadow teachers’ methods were effective as *“they have been doing things their way for many years and they think it works”* (ST 1).

Similarly, ST 3 remarked,

“From what I know, I think the younger teachers are very receptive. The older ones are a bit more conventional...so they have a more ‘don’t teach me how to manage my students, I can do everything myself’ kind of attitude. I think the difficulty is teamwork...and everyone needs to be able to work together”.

4.5.2 Collaboration with Parents

There is ample collaboration between the shadow teachers and the parents. Sometimes this starts even before the shadowing begins. ST 3 mentioned that she would meet with the parents before the start of the shadowing period and that they would share with her the things she should be looking out for. Through discussion with the parents and also the school, they would come to a general conclusion on the main goals and targets for the child. She declared that it was a collaborative effort between the school, the parents and the shadow teachers.

During the shadowing period, most of the shadow teachers provided daily updates for the parents, some through email, texting, or daily reports. ST 5 had a ‘communication book’ in which she wrote to the parents daily and in which they sometimes also shared some information about the child that may be useful for the shadow teacher. All six of the shadow teachers provided detailed monthly or termly reports and had face-to-face meetings to discuss the pupil’s achievements, goal setting and other issues.

“We do have a monthly update for the parents. So that they know how he is progressing. If he is going according to the goals, and if the way we are teaching and supporting him is actually benefiting him” (ST 1).

In general the shadow teachers describe that there is a lot of communication with the parents.

Parents’ Expectations

A number of shadow teachers, however, expressed some difficulties regarding fulfilling parents’ expectations. The main problem seemed to be unrealistic expectations. Some parents have “*unrealistic views on how fast fading can happen*” (ST 1) and some “*have goals that they think their child should already achieve, but they need to understand that sometimes some students take only one day, some students, for the same thing they take two years*” (ST 6). ST 4 contributed that some parents needed to understand that shadow teachers also had to deal with some behavioural issues, which took time, instead of expecting them to accomplish more.

To manage parents' expectations, the shadow teachers usually endeavoured to get the parents to *"look at the big picture"* (ST 1) and to explain to them that they had to be realistic. ST 6 suggested using words like *"He'll probably"* instead of absolute statements like *"He will"* or *"He's going to"*.

ST 3 explained, *"Most of them would want fading to end as soon as possible, because it's quite expensive and you want the kid to be independent. So we'll tell them that we need them to follow through the behaviour plans that we have, and if everything is consistent then it may happen faster"*. According to ST 5, most of the parents were fine with this. Some parents however, could be defensive: *"It's not easy to present an overview or big picture because sometimes being too realistic, the parents may be very defensive of their child. And they feel like you are putting their kid in a bad light"* (ST 1).

In some cases, shadow teachers had to deal with differing opinions about how the shadowing should proceed: *"I knew that he was not ready for Primary 1 without a shadow teacher but the parents were in denial and said that he would be fine without a shadow...so we have to respect that and work towards that goal by the end of the year even though we know that it is not possible. You have to really respect the parents' decision because it's their child and not ours"* (ST 3).

ST 3 also contributed that it is essential to have a protocol to explain their job scope to the parents. *"Sometimes some parents treat us like their child's personal nanny and that's not really our job. So it's important that the parents are clear about what we actually do"*.

She added that it was a challenge at times to get the parents and the school to come to an understanding *"because I have had experiences where they were not [in agreement], and it is extremely difficult"*. She declared that teamwork was crucial and that *"you're really lucky and really blessed if you are able to have all 3 sides, the parents, the school and us, all on the same page"*.

4.5.3 Support from the School

The shadow teachers were asked about the extent to which schools provided resources to support pupils with special needs. All of the shadow teachers indicated that they felt that resources were lacking. ST 1 shared that some schools may provide some learning aids and that they may speak to the teachers about how to declutter the room or adjust her teaching methods. But she described it as ‘not much’ and that the shadow teachers were expected to provide most learning aids. She explained that some schools felt that it was ‘too much of a hassle’ and that even if some of them accepted pupils with autism, they might not be equipped enough in terms of resources (e.g. visual aids for communication).

This was confirmed by all of the other shadow teachers as well, that they provided their own learning aids and materials. ST 4 had never tried to ask for additional resources while ST 2 and ST 5 indicated that their schools did not provide visual aids or other additional learning resources. ST 6 expressed that she did not have the habit of asking the school for resources. Even for items like paper, she preferred to bring it herself. She explained that she felt responsible to provide all the materials because she was ‘not from the school’ and felt that she had to ‘find [her] own way’. *“You’ve got markers, you’ve got color pencils, you’ve got whatever for that day”*.

ST 3 reflected that local schools were not as receptive as international schools in general, who *‘really welcome these kids with open arms and really make them feel included’*. She explained that the learning styles were very different as local schools were very academically oriented and focused more on academic performance (this was mentioned by ST 1 and ST 2 as well). ST 3 went on to say that *“whereas in the international schools, they learn through fun activities, so they really can try to bring them all together”*. She stated that she was extremely confident that she would be given resources and materials if she needed them.

When asked if the school was supportive and cooperative towards shadowing practices, ST 1 maintained that teacher receptiveness depended on the school climate. She experienced some instances where the school management wanted the shadowing to be over as quickly as possible (this was experienced by ST 2 as well) and therefore was not very receptive to implementing changes. *“They try having it for a week or two, and if the impact is not as big*

as they hope to achieve then they'll just remove it" (ST 1). Like ST 3, she added that the international schools were usually more open to collaborating with shadow teachers than the Singapore government schools were.

In other cases, the school management was the one who requested for a shadow teacher. Both ST 1 and ST 4 cited examples where the school was on the verge of expelling a pupil unless his or her parents hired a shadow teacher. ST 4 recalled, "The mom, at first, she didn't want a shadow teacher at all, but she was forced by the school, otherwise the child might've been expelled".

ST 4 was also working in an international school but she narrated a different experience. She disclosed that she had a very difficult time because the pupil was known for causing trouble in school and the school gave him an ultimatum — *"if you continue disrupting the learning of other pupils we cannot keep you in the school so you need a shadow teacher"*. She related that the pupil was working extra hard to behave himself and to abide to the school rules after he had been given the ultimatum but that 'the labels were already put on him'. She lamented that the school was not very cooperative. *"So they don't see the progress that he's making now, and even if he does make progress, they have this mindset that he's going to go back to what he was before. So that hampers him so much"*. (ST 4)

ST 6 shared that some schools allowed small modifications to be made. She mentioned that the only modifications they allowed were to adjust the duration of the test or to allow a change of location, and that even to obtain permission for that was a difficult process. She narrated a difficult situation in which a school decided that they were not going to 'allow' any more modifications — *"Indirectly they were telling us...find him another school. The principal said 'We don't need to change anything for him, because he's supposed to do what the other kids are supposed to do'. That is why he comes to a normal school"*.

4.5.4 Collaboration with Other Important Parties

All six of the shadow teachers have collaborated with other important parties like special needs personnel, other shadow teachers, and the pupils' other therapists. They narrated positive experiences and described the collaboration as beneficial.

ST 1 indicated that if the pupils had occupational and/or speech therapists, she would meet up with them so that they had a more consistent view about how each of them did things. Consequently, she would work on the same goals as the other therapists, in addition to her own goals, *“because he can’t be practicing those skills there [in therapy] and not generalizing the goals in the school setting”*. Likewise, ST 5 related that her pupil’s speech therapist updated her once in a while, so that she would know ‘what he has learned, and what to practice’. ST 6 contributed further, *“Sometimes you get updates on strategies that they’re using so that all of us are sort of using the same strategy. Or we share our strategy with them and they say ‘Oh, let’s see which one works better, let me use that one”*.

A few of the shadow teachers also mentioned collaborating with the school’s learning support coordinator or Allied Educator: *“Most of the time there will be an Allied Educator who would facilitate meetings between the school team, us and the parents”* (ST 3). *“And sometimes the Allied Educator will tell us that for fading to happen, she must achieve these targets. So that’s when we interact more with them. Other than that, on a weekly or monthly basis they come in and observe...and see how they can help”* (ST 1).

Most of the shadow teachers mentioned that their case managers usually checked in on their progress with the pupils and that some case managers attended meetings with the school as well. ST 1, ST 4 and ST 5 also added that they valued feedback and advice from other shadow teachers. ST 5 disclosed, *“I will discuss with my colleagues so if there is a problem, we will find a solution together”* while ST 4 stated that she uses the comments and feedback to gauge her work performance.

4.6 Additional Challenges

4.6.1 Child feeling even more ‘different’

ST 6 reported that the older pupils tended to feel quite embarrassed at times, especially when she went up to them during recess (break) time. Her pupil also told her once *“Can you work at the back of the class?”* as she was embarrassed to have an extra teacher sitting next to her.

She mentioned that it depended on their age – *“the younger kids, they don’t really care. But the older kids care”*.

On the contrary, the other shadow teachers expressed that their presence was, as a matter of fact, welcomed by the pupils.

“Not just my child, but other kids too...because when there is an assistant teacher in class, they get more attention so they like it. And then they come to you and share about their day, so it’s more of a positive awareness”, said ST 1. She explained that she tried to help the other pupils as well, to help them understand and to *“bring them in, the process of helping him integrate with the whole class in the school climate”*.

ST 2 and ST 4 related that their pupils felt more confident and secure when they were present, as opposed to feeling conscious that they were ‘different’ and ST 5 adds that her pupils have already gotten used to her presence.

There were definitely also some pupils with low awareness, who did not realise that the shadow teacher was there for them specifically. ST 3 remarked, *“I think that some of them are just not aware...but other kids will realise that you are there for so-and-so. Eventually some of them find out and I think it’s nice as well because they will form a bond with you. I still remember when this child got a reward card from his teacher and he was taken by surprise...he turned back and looked at me because I was at the back of the classroom. I think he wanted to seek approval from me as well. So it is also nice when they are aware”*.

4.6.2 Over-reliance or Dependence

Some of the shadow teachers expressed difficulty concerning when to help and when to step back and let the pupils manage on their own. ST 2 expressed that it was more difficult at the start but became easier as she got to know the pupil better. If she knew that the pupil was capable of doing something independently, her strategy was to observe him for a little while to ensure that it was ‘an attention issue and not an academic one’. ST 1 and ST 3 added that it was ‘very hard to strike a balance’ because the lines could be a ‘little blurred’ and there was ‘no set protocol’.

ST 6 brought up the issue of emotional attachment to the pupil and admitted that *“sometimes when I know he’s really unable to comprehend what is happening at all, I do tend to guide him a bit more than I’m supposed to”*. She admitted that at one point she felt like *“a babysitter instead of a shadow teacher”*.

ST 4, on the other hand, viewed it more as a patience issue: *“Sometimes because you know that certain tasks, ugh, you have to be very patient about it. Like ‘Ughh, I’m going to do it for you!’ Like putting on a sweater. You’re going ‘Ahhhh! I’m gonna do it for you!’ Then you have to think if you do it now, then he’ll think, ‘Eh, she’ll always be here to help me.’”*

Regarding over-reliance and dependence, ST 5 shared that *“the [mainstream] teacher always says that without our presence, he actually can do a lot. But when we are there, he tends to depend on us”*. But she solves the problem by walking away if she thinks that the pupil can do the task without her help. *“If he cannot see me, then he knows he will have to do the work himself”*.

Other shadow teachers also related that their pupils were dependent on them:

“There were times when I was absent and he could not really function well” (ST 2).

“When I’m not around, he’s like, ‘Where’s Ms. [name omitted]? Where is she?’ Even if I, let’s say that morning I’m a little bit late. He starts to panic” (ST 4).

Correspondingly, ST 3 articulated an important point – that shadow teachers also had to ensure that they did not expect the pupil to be independent too soon and to fade out too quickly. *“Otherwise sometimes their behaviour will regress and tantrums may come up again”*.

4.6.3 Non-uniformity

ST 1 and 6 brought up the issue that the standards for shadow teaching were not the same across the board. They mentioned that the industry was considerably new and some new

companies were hiring people with mid-career changes and who may not have experience in special needs.

“There are some cases where we take over a case and realize that you know, the last shadow, she was actually just there to babysit him” (ST 1).

She stated that the difference in standards was probably due to the lack of regulation across the industry. She emphasised that it was important that people were aware of this discrepancy and recommended that the shadow companies come up with initiatives to train the shadow teachers before sending them to the schools.

4.6.4 Large Class Sizes

3 of the shadow teachers (ST 1, ST 2 & ST 3) brought up the fact that Singaporean schools had large class sizes and this posed a challenge to achieving inclusion. ST 3 remarked, *“We don’t have enough teachers for smaller class sizes which suit inclusion more”*. She went on to explain that in small ‘pull-out’ classes (where pupils usually were academically weaker), mainstream teachers made an effort to include all pupils, whereas in a larger class, inclusive practices were ‘difficult’ to achieve because the teachers were under a lot of pressure to produce results. *“I think sometimes they feel very helpless too, like they don’t know what to do” (ST 3).*

5 Discussion

5.1 Introduction

The first part of this chapter (5.2) discusses the findings while using relevant literature and the research questions and sub-questions as a background for comprehension. The second part of the chapter (5.3) presents a summary of the key findings.

5.2 Relating the findings to theory and literature

5.2.1 Child Characteristics

In this study, the shadow teachers cited examples of how child characteristics was a factor influencing the quality of inclusion a pupil received. The type and severity of the learning disability was the most important child characteristic cited and it was found that children with more severe autism had more difficulty being included due to impaired social skills and behavioural issues. Comparatively, children who were ‘high-functioning’ participated better, and were included better. This was congruent with research findings (Mesibov & Shea 1996; Odom 2000; Yianni-Coudurier et al., 2008; Ho, 1997), which showed that children with low-functioning ability and who exhibited behavioural problems were less likely to be included. Other child characteristics mentioned by the shadow teachers were the child’s motivation and personality. Children who were motivated to change their behaviours and who had ‘likable’ personalities had an easier time being included. It is comprehensible that child characteristics play an important role, as the needs of every child are different. Based on those diverse needs, the path to achieving inclusion will be very dissimilar for different children.

5.2.2 Teacher Characteristics

Teacher Background and Training

In this study, it was found that teacher background and training influenced, to a certain extent, the ease with which shadow teachers implemented inclusive practices. The shadow

teachers who had more specialised training and background in inclusive education exhibited more expertise and knowledge about inclusive classroom practices. On the contrary, some of the shadow teachers claimed that insufficient training was a hindrance to them doing their job well. They also mentioned that mainstream teachers seemed to be lacking training in this area as well. Dickens-Smith (1995) and Florian (2000) propose that training is important for teachers to successfully put into place inclusive strategies.

On the other hand, the shadow teachers indicated that a lot of the skills they gained came from ‘on-the-job learning’ where experience was key to their learning. By ‘figuring’ things out for themselves, the shadow teachers pick up valuable skills and develop resources which are essential for their job. It thus can be said that teacher background and training impacts inclusion only to a certain extent as experience and on-the-job self-learning plays a large role as well.

Teacher Awareness and Knowledge about Inclusive Practices

Teacher awareness and knowledge seemed to be one of the most important factors influencing the success of inclusive practices. The shadow teachers and mainstream teachers who were unaware of the concept of inclusion were less likely to introduce inclusive methods whereas those with both awareness and knowledge were more actively pushing inclusive agendas. Shadow teachers who were more familiar with the concept of inclusion had more success in implementing inclusive policies because they had both the awareness and the knowledge to do so. On the contrary, a lack of awareness on the part of the mainstream teachers was detrimental to inclusion as these teachers did not understand the situation that the pupils with special needs were going through, much less tried to make the environment more inclusive for them. This confirmed the findings of previous research (Pivik, McComas, & Laflamme, 2002; Florian, 2000; Armstrong, 2011).

In the literature review, it was hypothesized that the presence of the shadow teacher would increase the mainstream teacher’s awareness towards inclusion. This was only true in some cases. In other cases, both the shadow teachers and mainstream teachers were not quite familiar with the concept of inclusion. This lack of exposure and awareness about inclusive education was also pointed out by Yeo et al. (2014) and might be attributed to the fact that inclusion is quite a new concept in Singapore. There seems to be a pressing need to increase

awareness as well as knowledge regarding inclusion and inclusive practices in Singaporean schools.

Teacher attitude towards Inclusion and Inclusive Practices

Both shadow and mainstream teachers' attitudes were important in deciding their motivation and willingness in working towards inclusion. The shadow teachers in general had positive attitudes towards the concept of inclusion and the implementation of inclusive classroom practices, even if some of them had certain reservations regarding the practicality and feasibility of it all. The mainstream teachers on the other hand, had a less positive outlook towards introducing inclusive practices and this reluctance was largely attributed to the fact that they believed inclusive methods only benefitted the pupils with special needs. It was suggested that it would be beneficial to change the teachers' mindsets by explaining that inclusive practices benefit each and every student, not just those with learning difficulties or special needs. Avramidis, Bayliss, & Burden (2000) propose that teachers' negative or neutral attitudes at the start of the process of inclusive education may change over time as they accumulate more experience and knowledge.

It was also found that older teachers were less receptive to inclusive practices than younger ones. This could be due to the fact that the older teachers were used to more conventional methods and classroom practices and were skeptical of 'new' inclusive methods. Greenberg and Baron (2000) asserts that experienced teachers usually had more resistance to educational reforms and that the barriers to change included reasons such as a failure to recognize the need for change, preference to keeping old habits instead of putting in effort to pick up new skills, as well as a fear of the unknown. All these factors pose as barriers to mainstream teachers' willingness to embrace inclusive reforms (Greenberg & Baron, 2000).

Shadow Teachers' Understanding of Role

This factor requires us to revisit the concept of integration. Although inclusion has superseded integration (Thomas et al, 2005, p. 21), the latter term still continues to be in use in Singapore. Integration refers to the placement of pupils with special needs in mainstream schools but unlike inclusion, which aims to create an inclusive environment that is responsive

to individual needs, integration is about fitting into existing structures without any restructuring of the environment (Thomas et al, 2005; Thomas, 1997).

In this study, the shadow teachers used the term ‘integrate’ and ‘include’ interchangeably. The term ‘integration’ was used even though all the shadow teachers were essentially describing inclusion and giving examples of inclusive practices. This is probably due to the fact that the shadow teachers were unaware of the definition of ‘integration’ as it is used in educational contexts, seeing as how the term ‘inclusion’ was not commonly used in Singaporean schools either.

Despite the confusion surrounding the usage of the word ‘integration’, the shadow teacher exhibited a clear understanding of what their role entailed. They understood that their job was to enable the child to be included in the environment by facilitating his or her participation and belongingness, even if the word ‘inclusion’ was not specifically mentioned in their job description. However, many of the shadow teachers highlighted that they would prefer a set of clearer guidelines and protocols when it came to the specifics of what the job required. Balshaw and Farrell (2002) as well as many others (Moran & Abbott, 2002, Howard & Ford, 2007, Ghore & York-Barr, 2007) affirm that clear job descriptions are required so as to ensure that work can be done effectively.

5.2.3 Collaboration

In this study, collaboration was the factor stated to have one of the largest (if not the largest) impacts on the success of inclusive practices. Collaboration with mainstream teachers and support from the school was stated to be of the utmost importance, in line with the sentiments of many (Rose, 2000; Clark et al., 1999; Downing, 1996; Jerwood, 1999, Balshaw, 1999). In cases where collaboration was successful and shadow teachers had a positive working relationship with mainstream teachers and the school, inclusive practices were said to be implemented with less difficulty and were reaping successful results.

On the contrary, insufficient and unsuccessful collaboration was listed many times as one of the biggest barriers to achieving inclusion. The findings indicated that in general, mainstream teachers were not very cooperative and were for the most part not very willing to collaborate

with shadow teachers. The responsibility of educating and guiding the pupil with special needs was largely left to the shadow teacher. This lack of support was sometimes attributed to the fact that the mainstream teachers were busy and had heavy workloads. MOE (2008) confirms that mainstream teachers in Singapore have many responsibilities aside from teaching, ranging from administrative duties to running co-curricular activities after lessons.

Tension among authority figures was also found to be a concern. Shadow teachers reflected that their presence was not always welcomed and was seen as intimidating at times by the mainstream teacher. Thomas (1992) cautions that there is a delicate balance in the classroom which requires tactful and respectful interaction so as to avoid the potential problems that may arise when two adults share the same classroom.

In addition, although school support has been found to be a crucial factor (Moran & Abbott, 2002), the Singaporean schools with which the shadow teachers in this study worked had varying openness towards shadow teaching. This could be attributed to the fact that shadow teacher was 'still a relatively foreign concept here' (*"More Shadow Teachers for Special Needs Pupils"*, 2012, p.1). Nevertheless, it has been found that more schools were becoming receptive to the idea of accepting shadow teachers in the classroom as compared to previous years (*"More Shadow Teachers for Special Needs Pupils"*, 2012). As for implementing inclusive practices, some allowed small changes such as modifying the exam duration and location, while some were unwilling to 'allow' any more modifications to be made. In cases like the latter, it is extremely difficult to achieve inclusion.

In this study, international schools were found to be more supportive and cooperative than local schools, which tended to be more academically oriented. The different school climates were said to be the factor that influenced how cooperative and supportive the mainstream teachers were. The shadow teachers pointed out that in international schools, more emphasis was placed on 'learning together while having fun' and that inclusive practices were 'part of their culture'. This was different from local schools, which focused more on achieving good academic results (OECD, 2013).

The shadow teachers also mentioned that there was a lack of resources provided by the school. Upon investigation, this could be due to the fact that most of the resources provided by the Ministry of Education were allocated to the Allied Educators for use in special support

rooms in schools (MOE, 2014). There are usually only one to two such rooms in each school and these rooms and resources are shared between all the pupils with special needs in the school. Utilising these resources and learning aids would mean the pupil being taken out of the classroom for separate lessons in the learning support room, which would be the opposite of what inclusive education is. There is a need to provide more resources for pupils with special needs that can be used within their own classrooms.

Additionally, the shadow teachers indicated that a close collaborative relationship with parents was essential and that it was important that parental expectations were managed appropriately. They suggested ways to deal with unrealistic parental expectations and recommended that it was important to explain the job scope properly so that there was no confusion. Collaboration with other important parties like speech and behavioural therapists, and other special needs personnel were also cited as beneficial to the effectiveness of strategies. Clark et al. (1999) phrase it aptly: ‘The more that teachers are constrained to work individually, deploying routinized and somewhat narrow expertise, the less likely they are to develop the flexible problem-solving strategies which will enable them to respond appropriately to the diversity of learners in their classrooms’ (p. 158). All parties benefit from the sharing of knowledge and expertise that arises from collaboration.

5.2.4 Additional Challenges

Pupil Feeling More ‘Different’

There were initial concerns, brought up in the literature review, that there might be an issue of the pupil feeling even more ‘different’ due to the presence of the shadow teacher (Marks et al., 1999; Logan, 2006). However, the findings in this study indicated that this was not an issue. Most of the shadow teachers reflected that their pupils felt ‘reassured’ and ‘secure’ in their presence, as opposed to feeling different from their peers. Only 1 shadow teacher reported that older pupils had the tendency to feel slightly embarrassed about having extra attention. Some of the shadow teachers shared that they did not sit directly next to their pupils and that they also offered to help other pupils in the classroom, so that their pupils would not feel singled out for needing extra assistance.

Dependence

As for the problem of over-reliance or ‘learned helplessness’ (Ainscow, 2000; Rose, 2000), the shadow teachers admitted that at the beginning, it was difficult to draw the line between helping too little and helping too much. As time went by and they began to get to know the pupils better, it became easier to know when to step back and let them learn to be independent. It must be added that a shadow teacher’s job includes ‘fading off’ as well, and this process is done gradually to reduce the dependence that the pupil has on the shadow teacher.

Non-uniformity

The shadow teaching industry is a young one (one of the first shadow teaching companies was set up in 2011), and the fact that it is not regulated by the government means that there are great discrepancies regarding the organization and implementation of shadow teaching practices. The findings of this study showed that there were large variations across the shadow support industry and different companies implemented different practices. Concerns have also been raised about the uneven standards of shadow teachers because there is no professional body governing this service (Chia, 2013). According to Ms Carrie Lupoli, founder of Live And Learn (a special needs consultancy firm), there are shadow teachers who have ‘very limited training, knowledge or supervision’ but parents turn to them as they are more affordable (Chia, 2013). Although all the shadow teachers interviewed were trained and educated in relevant disciplines, some of them mentioned that they were aware that other smaller shadow teaching companies were hiring shadow support staff who had no prior experience and training. This is an area of concern, seeing as background, training and knowledge are essential in ensuring that inclusion is achieved.

Large Class Sizes

Some of the shadow teachers also mentioned that large class sizes were not optimal for inclusion because the mainstream teacher does not have the time to focus on the pupils with special needs. It must be noted that in Singapore, most schools employ a system where pupils are ‘streamed’ into different academic streams or bands based on their academic performance (MOE, 2014). Most of the time, this results in every class having pupils of approximately the

same learning speeds and abilities. The advantage is that the mainstream teachers are able to speed up or slow down their teaching speeds based on the learning pace of the pupils. They are able to introduce more information (or information of a higher difficulty level) if the pupils are able to understand it. However, this poses a problem when one of the pupils has a learning difficulty and is unable to learn as fast as the others. The mainstream teacher is under a lot of pressure to produce good academic results as well (OECD, 2011; Bedlington, 1978) and he or she may not want to slow down the pace or to change her teaching methods if it means that the other pupils might end up learning less. Education consultant Sarah Bowler puts it this way, “There is a grey area for children who fall between the two spectrums – too *high* functioning to need a specialist school, but too *low* functioning to fit the mainstream criteria and flourish in a mainstream environment” (as cited in ‘*Specialist education for children in Singapore*’, 2013). In these cases, these children benefit from having a shadow teacher in the classroom who tries to modify the environment to make it more inclusive than it otherwise would be.

5.3 Summary of Key Findings

Inclusion in Singapore

This study has allowed us a glimpse of what education in Singapore entails and the current situation regarding inclusive education. The findings indicated that most of the aspects of inclusion (presence, participation, acceptance and achievement) (Farell, 2004) were fulfilled to a certain extent. The shadow teachers reported that pupils were spending most of the time in the classroom with their peers, and participating actively. These pupils feel accepted and included by their peers and have achieved considerably good results in school as well.

Inclusion dictates that the environment has to be modified to suit the diverse needs of pupils. In this study, although the shadow teachers were not able to make massive changes to the environment, they were able to implement small changes and strategies that helped their pupils to thrive in mainstream classrooms. It can be argued that this is a big step towards a more inclusive school.

In addition, some shadow teachers mentioned that without their assistance, there was a high probability that their pupils would have been taken out of their classrooms for one-on-one sessions with the Allied Educator or other special needs personnel. Some schools were also on the verge of expelling some pupils unless shadow teachers were hired. This implies that shadow teachers play a critical role in ensuring that pupils with special needs were able to be educated in mainstream schools and that they had the chance to interact with their peers in inclusive environments.

Factors influencing Inclusion

In this study, all of the factors brought up in the literature review were found to influence the implementation of inclusive practices. In particular, collaboration, especially collaboration with mainstream teachers and the school, was found to be the most deciding factor in determining the success or failure of inclusive practices. The second most important factor had to be teacher awareness and knowledge about inclusive practices.

All the factors were found to be linked to a certain extent; each factor directly or indirectly affected another and all of them had an impact on inclusion.

The school climate impacted teacher attitudes and motivation, which in turn influenced teachers' *willingness* to collaborate. A lack of awareness (and thus knowledge) of mainstream teachers was found to impede their *ability* to collaborate. The shadow teachers exhibited positive attitudes towards inclusion but were hampered by a lack of teacher and school support.

This mutual dependence implies that all factors are vital and that schools should work on all the different but interdependent components if they want to achieve successful inclusion.

6 Conclusion

6.1 Implications for Inclusive Education in Singapore

The essence of this study was to explore shadow teacher experiences and challenges in implementing inclusive practices in Singaporean classrooms and to find out which factors affected the success of these inclusion policies. The results showed that there was still a lot to be done before Singaporean schools would reach some semblance of full inclusion.

Based on the findings of this study, the researcher would like to suggest the following:

It is of the utmost importance to raise awareness about the need for inclusive classroom practices. Teacher training and professional development would help to increase awareness and knowledge, and this might additionally result in more positive teacher attitudes towards collaboration with shadow teachers and other support staff. The Ministry of Education and schools need to emphasise that it is vital that mainstream teachers support shadow teachers and other relevant parties. In addition, it would be beneficial to provide more manpower in schools and reduce class sizes wherever possible.

Achieving inclusion in Singaporean schools will always be a challenge due to conflicting objectives – to include everyone and to make sure that nobody gets left behind? Or to teach with the aim of producing some pupils with excellent academic results, at the expense of neglecting others?

Education is fluid and educational needs are ever-changing. The definition of what a good education entails needs to be challenged and re-evaluated. Cultural and mindset changes have to happen, and schools need to develop an '*inclusive school culture*' (Groom & Rose, 2005, p. 26) before it will be possible to achieve true inclusion.

The researcher would like to conclude by saying that the outlook for inclusive education in Singapore is not as dreary as it seems. Although there is a long road ahead, Singapore has, in

fact, come a long way and things are constantly changing for the better. In time to come, it is expected that schools will become more inclusive in nature.

6.2 Limitations of the Study

The results of this study are based on the perspectives of a small group of shadow teachers in the industry, and said shadow teachers have only worked in a small number of schools. As such, the findings cannot be generalised to the larger population. The Singaporean education system is also significantly different from many education systems elsewhere in the world and therefore the results cannot be said to be representative of other educational contexts.

This study does, however, provide some knowledge about a relatively new phenomenon that is shadow teaching and hopefully offers some insight into the implementation of inclusive practices in classrooms that employ shadow teachers.

6.3 Potential for Future Research

It would be interesting for future studies to compare the implementation of inclusive practices in international schools and local schools to explore if there was a difference in shadow teacher experiences in the different school climates. It would also be useful to expand on this study by incorporating other research methods such as observation, and to interview other parties involved (such as the mainstream teachers, school management, parents and other special needs personnel). Furthermore, it would be interesting to explore other factors (not examined in this study) that influence inclusion. Lastly, it would be useful to monitor developments within the next few years to follow the progress of this industry and to compare the extent of inclusion in schools a few years down the road.

References

ACS Athens. (2014). *Shadow Teachers*. Retrieved from: <http://www.acs.gr/shadow-teachers/>

Ainscow, M. (2000). The next step for special education: Supporting the development of inclusive practices. *British Journal of Special Education*, 27(2), 76–80.

Allinder, R. M. (1994). The relationship between efficacy and the instructional practices of special education teachers and consultants. *Teacher Education and Special Education*, 17, 86–95.

Ang, L. (2005). *A Perspective on Inclusion and the Singapore Context*. Retrieved from: www.omep-sgp.org/omep/school/words/ref_on_incl.doc

Armstrong, F. (2011). Inclusive Education: School Cultures, Teaching and Learning in Richards, G and F. Armstrong (eds) *Teaching and Learning in Diverse and Inclusive Classrooms: Key issues for new teachers*. London: Routledge

Avramidis, E., Bayliss, P., & Burden, R. (2000). A Survey into Mainstream Teachers' Attitudes Towards the Inclusion of Children with Special Educational Needs in the Ordinary School in one Local Education Authority. *Educational Psychology: An International Journal of Experimental Educational Psychology*, 20(2), 191-211, DOI: 10.1080/713663717

Ballard, K. (Ed.) (1999). *Inclusive Education: International Voices on Disability and Justice*. London: Falmer Press.

Balshaw, M. (1999). *Help in the Classroom*. (2nd ed.) London: David Fulton.

Balshaw, M., & Farrell, P. (2002). *Teacher assistants: Practical strategies for effective classroom support*. London: David Fulton.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191–215.

Barton, L. & Armstrong, F. (2007) 'Policy, Experience and Change and the Challenge of Inclusive Education: The Case of England' in Barton, L., & F. Armstrong, (eds) *Policy, Experience and Change: Cross Cultural Reflections on Inclusive Education*, Dordrecht: Springer, pp. 05-18

Bedlington, S. S. (1978). *Malaysia and Singapore : The Building of New States*. Ithaca: Cornell University Press

- Beh-Pajoo, A. (1992). The effect of social contact on college teachers' attitudes towards students with severe mental handicaps and their educational integration. *European Journal of Special Needs Education*, 7, 231–236.
- Booth, T. & Ainscow, M. (eds) (1998). *From Them to Us: An International Study of Inclusion in Education*. London: Routledge.
- Bronfenbrenner, U. (1979). *The Ecology of Human Development*. Harvard University Press: Cambridge.
- Bryman, A. (2004). *Social Research Methods* (2nd ed.). Oxford: Oxford University Press.
- Butt, R. & Lowe, K. (2011). Teaching assistants and class teachers: differing perceptions, role confusion and the benefits of skills based training. In *International Journal of Inclusive Education*, 16(2), 207-219. DOI: 10.1080/13603111003739678
- Center, Y. & Ward, J. (1987). Teachers' attitudes towards the integration of disabled children into regular schools, *Exceptional Child*, 34, 41–56.
- Chazan, M. (1994). The attitudes of mainstream teachers towards pupils with emotional and behavioural difficulties, *European Journal of Special Needs Education*, 9, 261–274.
- Chia, S. (2013, March 3). *Personal Help for Special Needs Kids*. The Straits Times. Retrieved from: <http://yourhealth.asiaone.com/content/personal-help-special-needs-kids>
- Clark, C. (1999). Inclusive education and schools as organizations. *International Journal of Inclusive Education*, 3(1), 37-51, DOI: 10.1080/136031199285174
- Clark, C., Dyson, A., Millward, A. & Robson, C. (1999) Theories of inclusion. Theories of schools: deconstructing and reconstructing the inclusive school. *British Educational Research Journal*, 25 (2), 157– 77.
- Clough, P. & Lindsay, G. (1991). *Integration and the Support Service*. Slough: NFER.
- Cramer, E.D. (2010). Education of children with special needs: Co-teaching. In B. McGaw, E. Baker and P. Peterson (Eds.) *International Encyclopedia of Education*, (3rd ed.). Oxford: Elsevier.
- Creswell, J. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Los Angeles, CA: Sage
- Creswell, J. W. (2012). *Educational research : planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston: Pearson.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (1994). *Handbook of Qualitative Research*, Thousand Oaks, CA: Sage

Department Of Education For Northern Ireland (1995). *Making a Good Start – Operation of the Primary 1 Initiative* (Circular No. 1996/26). Bangor: DENI.

Dickens-Smith, M. (1995). *The Effect of Inclusion Training on Teacher Attitude towards Inclusion*; ERIC Document No. ED 332 802.

Diebold, M. H. & Von Eschenbach, J. F. (1991). Teacher educator predictions of regular class teacher perceptions of mainstreaming, *Teacher Education and Special Education*, 14, 221–227.

Dierdorff, E. C. & Morgenson, F. P. (2007). Consensus in work role requirements: The influence of discrete occupational context on role expectations. *Journal of Applied Psychology*, 92(5), 1228- 1241.

Downing, J. (1996). *Including Students with Severe and Multiple Disabilities in Typical Classrooms*. Baltimore, Md.: Paul H. Brookes.

Downing, J. E., Ryndak, D. L., & Clark, D. (2000). Para educators in inclusive classrooms. *Remedial and Special Education*, 21(3), 171-181.

Eaves, L. C. & Ho, H. H. (1997). School placement and academic achievement in children with autistic spectrum disorders. *Journal of Developmental and Physical Disabilities* 9, 277–91.

Ebersold, S. (2003). Inclusion and mainstream education: an equal cooperation system. *European Journal of Special Needs Education* 18, 89–107.

Enabling Education Network (EENET). (1998). *EENET's Definition of Inclusive Education*. Retrieved from: http://www.eenet.org.uk/EENET_def_of_IE.php

Evans, J. & Lunt, I. (2002). Inclusive Education: Are There Limits? *European Journal of Special Needs Education* 17(1), 1–14

Farrell, P. (1997). 'The integration of children with severe learning difficulties: a review of recent literature', *Journal of Applied Research in Intellectual Disabilities*, 10, 1–14.

Farrell, P. (2004) School Psychologists: Making Inclusion a Reality for All. *School Psychology International*, 25(5). DOI: 10.1177/0143034304041500

- Farrell, P. & Ainscow, M. (2002). Making Special Education Inclusive: Mapping the Issues, in P. Farrell & M. Ainscow (eds) *Making Special Education Inclusive*. London: Fulton.
- Florian, L. (2000). Inclusive practice: what, why and how?. In: Tilstone, C., Florian, L. & Rose, R. (Eds) *Promoting Inclusive Practice*. London: Routledge
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational Research: An Introduction* (8th ed.). Pearson: Boston.
- Ghere, G. & York-Barr, J. (2007). Paraprofessional turnover and retention in inclusive programs. *Remedial and Special Education*, 28(1), 21- 32.
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Government of Singapore. (2015). *Statistics*. Retrieved from the Department of Statistics Singapore: <http://www.singstat.gov.sg/statistics/latest-data#14>
- Greenberg, J., & Baron, R. A. (2000). *Behavior in organizations* (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Groom, B. & Rose, R. (2005). Supporting the inclusion of pupils with social, emotional and behavioural difficulties in the primary school: the role of teaching assistants. *Journal of Research in Special Educational Needs*, 5, 20–30. DOI: 10.1111/j.1471-3802.2005.00035.x
- Hancock, R., Swann, W., Marr, A., Turner, J., Cable, C. (2002). *Classroom assistants in primary schools: employment and deployment*. Milton Keynes: The Open University Faculty of Education and Language Studies Centre for Curriculum and Teaching Studies.
- Health and Human Services, U.S (HHS). (2009). *Code of Federal Regulations*. Retrieved from <http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html>
- Howard, R. & Ford, J. (2007). The roles and responsibilities of teacher aids supporting students with special needs in secondary school settings. *Australasian Journal of Special Education*, 31(1), 25-43. DOI: 10.1080/1030010701268461
- Howes, A., Farrell, P., Kaplan, I. & Moss, S. (2003) *The Impact of Paid Adult Support on the Participation and Learning of Pupils in Mainstream Schools*. London: EPPI Centre, Social Science Research Unit, Institute of Education, University of London.
- Husserl, E. (1970). *The Crisis of the European Sciences and Transcendental Phenomenology*. Evanston: Northwestern University Press

Janney, R. F., Snell, M. E., Beers, M. K. & Raynes, M. (1995). Integrating children with moderate and severe disabilities into general education classes, *Exceptional Children*, 61, 425–439.

Jerwood, L. (1999). Using special needs assistants effectively. *British Journal of Special Education*, 26(3), 127–129.

Joppe, M. (2000). *The Research Process*. Retrieved from <http://www.ryerson.ca/~mjoppe/rp.htm>

Keating, S. & O'Connor, U. (2012). The shifting role of the special needs assistant in Irish classrooms: a time for change? *European Journal of Special Needs Education*, 27(4), 533–544, DOI: 10.1080/08856257.2012.711960

Kinsella, W. & Senior, J. (2008) Developing inclusive schools: a systematic approach. *International Journal of Inclusive Education*, 12, 651–65.

Kvale, S. & Brinkmann, S. (2009). *Interviews*. (2nd ed.). Sage Publications: Los Angeles.

Lacey, P. (2001) *Support Partnerships: Collaboration in Action*. London: David Fulton.

Lee, B. & Mawson, C. (1998) *Survey of classroom assistants*. London: National Foundation for Educational Research for UNISON.

Leong, D. Y. (2014). *Pupil-Teacher Ratio (PTR) Differs from Class Size*. Retrieved from: <http://www.moe.gov.sg/media/forum/2014/07/pupil-teacher-ratio.php>

Liang, E. H. (2012). *Target Class Size in Primary and Secondary Schools*. Retrieved from: <http://www.moe.gov.sg/media/parliamentary-replies/2012/04/target-class-size-in-primary-a.php>

Lim, W. (2011). *Support for Students with Special Needs*. Retrieved from: <http://www.moe.gov.sg/media/forum/2011/12/support-for-students-with-special-needs.php>

Lindsay, G. (2007). Educational psychology and the effectiveness of inclusive education/mainstreaming. *British Journal of Educational Psychology*, 77, 1–24. DOI:10.1348/000709906X156881

Logan, A. (2006). The role of the special needs assistant supporting pupils with special educational needs in Irish mainstream primary schools. *Support for Learning*, 21, 92–99. DOI: 10.1111/j.1467-9604.2006.00410.x

Lorenz, S (1998). *Effective In-Class Support*. London:Fulton

Marks, S., Schrader, C. & Levine, M. (1999). Paraeducator experiences in inclusive settings: Helping, hovering, or holding their own? *Exceptional Children*, 65(3), 315–328.

Marshall, C., & Rossman, G.B. (2006). *Designing qualitative research* (4th ed.) Thousand Oaks, CA: Sage

Maxwell, J. A. (2005). *Qualitative Research Design. An Interactive Approach*. California: Sage publications.

McMillan, J. H., & Schumacher, S. (2001). *Research in education: A conceptual introduction* (5th ed.). New York: Longman.

McVittie, E. (2005). The role of the teaching assistant: An investigative study to discover if teaching assistants are being used effectively to support children with special educational needs in mainstream schools. *International Journal of Primary, Elementary and Early Years Education*, 33(3), 26-31, DOI: 10.1080/03004270585200301

Merrell, K. M., & Gimpel, G. A. (1998). *Social skills of children and adolescents: Conceptualization, assessment, and treatment*. Mahwah, NJ: Erlbaum.

Merriam, S.B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass

Mesibov G. B. & Shea V. (1996). Full inclusion and students with autism. *Journal of Autism and Developmental Disorders*, 26, 337–46.

Milestones Education. (2013). *Shadow Teaching*. Retrieved from: <http://www.milestones-education.com/services.html>

Ministry of Education, Singapore (2013). *Pupil-Teacher ratios in primary and secondary schools* Retrieved from: <http://www.moe.gov.sg/media/parliamentary-replies/2013/10/pupil-teacher-ratios-in-primary-and-secondary-schools.php>

Ministry of Education, Singapore (2014). *Support for Children with Special Needs*. Retrieved from: <http://www.moe.gov.sg/education/programmes/support-for-children-special-needs/>

Moran, A. & Abbott, L. (2002). Developing inclusive schools: the pivotal role of teaching assistants in promoting inclusion in special and mainstream schools in Northern Ireland, *European Journal of Special Needs Education*, 17(2), 161-173, DOI: 10.1080/08856250210129074

More Shadow Teachers for Special Needs Pupils. (2012, January 30) *TODAY Online*. Retrieved from: <http://www.nie.edu.sg/newsroom/media-coverage/2012/more-shadow-teachers-special-needs-pupils>

Morse, J. (1991). On the evaluation of qualitative proposals. *Qualitative Health Research*, 1(2), 147-151.

Myles, B. S. & Simpson, R. L. (1989). Regular educators' modification preferences for mainstreaming mildly handicapped children, *Journal of Special Education*, 22, 479-491.

NIE/NTU. (2013). *Special Education in Singapore*. Retrieved from SingTeach: <http://singteach.nie.edu.sg/issue41-bigidea/>

Norwich, B. (1994). The relationship between attitudes to the integration of children with special educational needs and wider socio-political views: a US-English comparison, *European Journal of Special Needs Education*, 9, 91-106.

Nurture Pods (2014). *School Support Program (School Shadowing Support)*. Retrieved from: <http://nurturepods.com/our-services/school-support-program-school-shadowing-support/>

Nurture Pods. (2014). *Training Workshops*. Retrieved from: <http://nurturepods.com/our-services/training-workshop-for-parents-teachers-and-para-professionals/>

Odom L. S. (2000). Preschool inclusion: what we know and where we go from here. *Topics in Early Childhood Special Education* 20, 20-7.

OECD. (2011). *Lessons from PISA for the United States, Strong Performers and Successful Reformers in Education*, OECD Publishing. <http://dx.doi.org/10.1787/9789264096660-en>

OECD. (2013). *PISA 2012 Results: What Makes Schools Successful (Volume IV): Resources, Policies and Practices*, PISA, OECD Publishing.
DOI: 10.1787/9789264201156-en

Oliver, M. (1990). The individual and social models of disability. Paper presented at Joint Workshop of the Living Options Group and the Research Unit of the Royal College of Physicians, Thames, UK.

Patton, M. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage

Pivik, J., McComas, J., & Laflamme, M. (2002). Barriers and facilitators to inclusive education. *Exceptional children*, 69(1), 97-107.

- Poon K., Musti-Ra, S., & Wettasinghe, M. (2013). Special education in Singapore: History, trends, and future directions. *Intervention in School Clinic*, 49(1), 59-64. DOI:10.1177/1053451212472230
- Punch, K. F. (2005). *Introduction to social research: quantitative and qualitative approaches* (2nd ed.) London: Sage
- Ripley, S. (1997). Collaboration between general and special education teachers. *ERIC Digest*. ED409317.
- Rose, R. (2000). Using classroom support in a primary school. *British Journal of Special Education*, 27(4), 191–196
- Sharma, U., Loreman, T., and Forlin, C. (2012). Measuring teacher efficacy to implement inclusive practices. *Journal of Research in Special Educational Needs*, 12 (1), 12–21. DOI: 10.1111/j.1471-3802.2011.01200.x
- Shadow Advantage. (2014). *What is a Shadow Support?* Retrieved from: <http://www.shadowadvantage.com/index.php?page=shadow-support>
- Shimman, P. (1990). The impact of special needs students at a further education college: a report on a questionnaire. *Journal of Further and Higher Education*, 14, 83–91.
- Singstat, Department of Statistics Singapore. (2014). *Latest Data: Population and Land Area*. Retrieved from: http://www.singstat.gov.sg/statistics/latest_data.html#14
- Society for the Physically Disabled, SPD Singapore. (2014) *Inclusive Education and Inclusive Mindset for an Inclusive Society*. Retrieved from: <http://www.spd.org.sg/updates/detail/inclusive-education-and-inclusive-mindset-for-an-inclusive-society-39.html>
- Soodak, L. C., Podell, D. M. & Lehman, L. R. (1998) Teacher, student, and school attributes as predictors of teachers' responses to inclusion. *Journal of Special Education*, 31, 480–97.
- Specialist education for children in Singapore (1 March 2013) *Expat Living Singapore* Retrieved from: http://www.expatliving.sg/kids/education_enrichment/Specialist-education-for-children-in-Singapore-6257.ece
- Stoutjesdijk, R., Scholte, E.M. & Swaab, H. (2012). Special Needs Characteristics of Children with Emotional and Behavioral Disorders that Affect Inclusion in Regular Education. *Journal of Emotional and Behavioral Disorders*, 20(2), 92-104 DOI: 10.1177/1063426611421156

- Strauss, A. (1987). *Qualitative analysis for social scientists*. New York: Cambridge University Press.
- Thomas, G. (1992) *Effective Classroom Teamwork: Support or Intrusion?* London: Routledge.
- Thomas, G. (1997) Inclusive schools for an inclusive society, *British Journal of Special Education*, 24, 103-107.
- Thomas, G., D. Walker & J. Webb. (2005). *Inclusive education: the ideals and the practice* in Keith Topping and Sheelagh Maloney (eds) *The Routledge-Falmer Reader in Inclusive education*. London: Routledge-Falmer press.
- Tschannen-Moran, M., Woolfolk, H. A. & Hoy, W. K. (1998) Teacher efficacy: its meaning and measure. *Review of Educational Research*, 68, 202–48.
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001) Teacher efficacy: capturing an elusive construct. *Teaching and Teacher Education*, 17, 783–805.
- UNESCO. (1994). *The UNESCO Salamanca Statement and Framework for Action on Special Educational Needs Education*. Paris: UNESCO.
- UNESCO. (1997). *United Nations Resolution of Education for All*. Paris: UNESCO
- UNESCO. (2005). *Guidelines for Inclusion: Ensuring Access to Education for All*. Paris: UNESCO
- Vulliamy, G., & Webb, R. (2003). Reducing school exclusions: An evaluation of a multi-site development project. *Oxford Review of Education*, 29(1), 33-49. DOI: 10.1080/03054980307439
- Weisel, A. & Dror, O. (2006) School climate, sense of efficacy and Israeli teachers' attitudes toward inclusion of students with special needs. *Education, Citizenship and Social Justice*, 1, 157–74.
- Yeo, L. S., Chong, W. H., Neihart, M. F., Huan, V. S. (2014). Teachers' experience with inclusive education in Singapore. *Asia Pacific Journal of Education*, DOI: 10.1080/02188791.2014.934781
- Yianni-Coudurier, C., Darrou, C., Lenoir, P., Verrecchia, B., Assouline, B., Ledesert, B., ... Baghdadli, A. (2008), What clinical characteristics of children with autism influence their inclusion in regular classrooms? *Journal of Intellectual Disability Research*, 52, 855–863. DOI: 10.1111/j.1365-2788.2008.01100.x

Yin, R. K. (2011). *Qualitative Research from Start to Finish*. The Guilford Press: New York.

Appendices

Appendix 1: The Interview Guide

Interview Guide

- Introduction
- Explaining the study
- Signing of consent form
- Start Interview

Understanding of Role

1. What is your job description? (Job contract/guidelines)
2. Is your role clearly defined? (e.g. what to do, what not to do?)
3. Are you supposed to work with only 1 pupil or do you offer assistance to other pupils in the class as well?

Awareness & Knowledge

4. What kind of educational background/working experience do you have?
5. Did you undergo extra training since you've started working as a shadow teacher? (What kind of training?)
6. How do you define the term "inclusive education"?
7. How much knowledge do you have about implementing inclusive practices?
8. Does your job description focus on Inclusion?

Attitudes towards inclusion

9. How do you feel about:
 - a) inclusion (positive/neutral/negative attitude)
 - b) implementing inclusive practices in the classroom? (positive/neutral/negative attitude)
10. Would you say that you contribute towards inclusion in Singapore?

a) Yes/No

b) Why or why not? / How?

11. Do you consciously try to create an inclusive environment for your pupils? How?

Inclusion

12. How often do your pupils get taken out of the classroom? (if at all)

a) Why?

b) What kind of activities do they do when they are in and when they are out of the classroom?

c) To what extent do they participate in activities?

13. To what extent are they accepted among their peers and feel that they belong?

14. Do you think that child characteristics affect the quality of inclusion that they receive? Give examples.

15. Would you say that your work with your pupils have helped them to be better included in the mainstream school? Elaborate.

Shadow Teachers' Experiences & Challenges

16. What are some of the experiences that you've had as a shadow teacher?

a) What kind of support? Activities?

b) Where do you sit in class?

17. Do you chart/monitor the progress of your pupil? How so?

18. How do you use the results?

19. What is the average length of time that you usually spend working with the same pupil before he/she no longer needs shadowing?

20. What are some of the challenges that you've had to face?

21. Does the child that you are shadowing feel even more 'different' because of your presence in the classroom?

22. Is it hard to strike a balance between helping too little and helping too much?

23. Do teachers feel like it takes the responsibility off them, since you are there to help the pupil?

Collaboration

24. Are the mainstream teachers trained in SNE?
25. Do the mainstream teachers put in extra effort to adapt the class curriculum /environment for those pupils with special needs?
26. (how?)
27. Do you collaborate with the mainstream teacher? (how often and how?)
28. Does the mainstream teacher involve you in planning? (How often/to what extent?)
29. Do you get sufficient support from the school?
30. Collaboration with parents: how often do you update them, what kind of information do you tell them?
31. How do you cope with or manage parents' expectations?
32. Do you collaborate with other shadow teachers or other special needs personnel?

Private Industry

33. Does the fact that this is a private industry in Singapore affect your role in any way?
34. (Is there a difference that this is a private industry and does this change anything?)

Conclusion

35. Do you have any suggestions regarding shadow teaching and how to improve it?
36. Do you have any other comments?

- Convey thanks
- End interview

Appendix 2: The Letter of Consent

Request for participation in research project

Factors Influencing the Success of Inclusive Practices

in Singaporean Schools

Shadow Teachers' Perspectives

Background and Purpose

Dear participant, my name is Melanie Ng and I am currently studying a Master of Philosophy in Special Needs Education at the University of Oslo, Norway. As part of my post-graduate studies, I will be undertaking research regarding Shadow Teachers employed in mainstream classrooms.

I would like to investigate if shadow teachers, on top of helping the pupils assimilate into mainstream schools, simultaneously contribute towards the goal of inclusive schools and to examine their experiences in contributing towards inclusion. My research question is: what are shadow teachers experiences in contributing towards inclusive practices in Singapore schools? The focus will be on the shadow teachers and their experiences, and the questions will be examined from their perspective.

As part of this research, I will interview shadow teachers who are working with children with special needs in mainstream classrooms, and who have at least 1 year of experience working in this field. Participants who are willing to participate and who meet this criteria will be selected.

What does participation in the project imply?

Semi-structured interviews will be the method of data collection. An interview guide as well as a keyword list will be used during the interviews. The interview guide will contain a list of open-ended questions that have been derived from the aims and objectives of this study. The interviews will be informal and flexible, and carried out in a conversational style. The interviews are expected to last between 35-60 minutes and will be recorded with an audio recorder. Questions include: What is your job description? Would you say that you contribute

towards inclusion in Singapore? What are some of the challenges that you have had to face?, and so forth.

What will happen to the information about you?

All personal data will be treated confidentially. Identifying information will not be collected and only the researcher (me) and my supervisor will have access to the data. The data and recordings will be stored in a password-protected laptop, accessible only by the researcher. Participants will not be recognizable in the publication and specific details will be omitted.

The project is scheduled for completion by August, 2015. After which all data and recordings will be deleted.

Voluntary participation

It is voluntary to participate in the project, and you can at any time choose to withdraw your consent without stating any reason. If you decide to withdraw, all your personal data will be made anonymous.

If you would like to participate or if you have any questions concerning the project, please contact Melanie Ng at (email emitted).

The study has been notified to the Data Protection Official for Research, Norwegian Social Science Data Services.

Consent for participation in the study

I would like to participate in the study, “Shadow teachers’ Experiences in Contributing Towards Inclusion in Singapore”.

I have received information regarding the study and I am also aware that I am able to withdraw at any time without prejudice or reason.

(Signed by participant, date)

Participation in this research is greatly appreciated by myself and the University of Oslo.

Yours sincerely,
Melanie Ng

Appendix 3: Permission from NSD

Norsk samfunnsvitenskapelig datatjeneste AS
NORWEGIAN SOCIAL SCIENCE DATA SERVICES



Harald Hørfagres gate 29
N-5007 Bergen
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Kari-Anne B. Næss
Institutt for spesialpedagogikk Universitetet i Oslo
Postboks 1140 Blindern
0318 OSLO

Vår dato: 21.08.2014

Vår ref: 39434 / 3 / KH

Deres dato:

Deres ref:

TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 12.08.2014. Meldingen gjelder prosjektet:

| | |
|----------------------|---|
| 39434 | <i>Shadow teachers' Perceptions of their Roles in Contributing Towards Inclusion in Singapore</i> |
| Behandlingsansvarlig | Universitetet i Oslo, ved institusjonens øverste leder |
| Daglig ansvarlig | Kari-Anne B. Næss |
| Student | Melanie Ng |

Etter gjennomgang av opplysninger gitt i meldeskjemaet og øvrig dokumentasjon, finner vi at prosjektet ikke medfører meldeplikt eller konsesjonsplikt etter personopplysningslovens §§ 31 og 33.

Dersom prosjektopplegget endres i forhold til de opplysninger som ligger til grunn for vår vurdering, skal prosjektet meldes på nytt. Endringsmeldinger gis via et eget skjema, <http://www.nsd.uib.no/personvern/meldeplikt/skjema.html>.

Vedlagt følger vår begrunnelse for hvorfor prosjektet ikke er meldepliktig.

Vennlig hilsen

Katrine Utaaker Segadal

Kjersti Haugstvedt

Kontaktperson: Kjersti Haugstvedt tlf: 55 58 29 53

Vedlegg: Prosjektvurdering

Kopi: Melanie Ng mel_ngsh@hotmail.com

Dokumentet er elektronisk produsert og godkjent ved NSDs rutiner for elektronisk godkjenning.

Avdelingskontorer / District Offices:

OSLO: NSD, Universitetet i Oslo, Postboks 1055 Blindern, 0316 Oslo. Tel: +47 22 85 52 11. nsd@uio.no
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Personvernombudet for forskning



Prosjektvurdering - Kommentar

Prosjektnr: 39434

Based on the information we have received about the project, the Data Protection Official cannot see that the project will entail a processing of personal data by electronic means, or an establishment of a manual personal data filing system containing sensitive data. The project will therefore not be subject to notification according to the Personal Data Act.

The Data Protection Official presupposes that all information processed using electronic equipment in the project is anonymous.

Anonymous information is defined as information that cannot identify individuals in the data set in any of the following ways:

- directly, through uniquely identifiable characteristic (such as name, social security number, email address, etc.)
- indirectly, through a combination of background variables (such as residence/institution, gender, age, etc.)
- through a list of names referring to an encryption formula or code